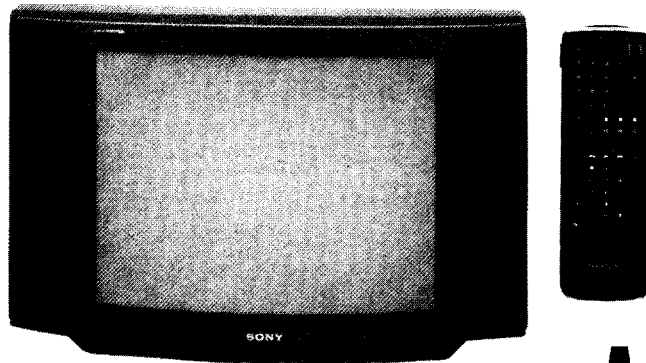


# KV-C2941D

## RM-816

## SERVICE MANUAL

*AEP Model*  
Chassis No. SCC-F07P-A



## AE-1C CHASSIS

MODELS OF THE SAME SERIES	
KV-C2941D	KV-E2521D/E2921D
KV-C2551D/C2951D	
KV-A2111D/A2511D	

### SPECIFICATIONS

Television system	B/G/H
Color system	PAL, SECAM, NTSC3.58, NTSC4.43
Stereo system	GERMAN stereo
Channel coverage	VHF: E2-E12 UHF: E21-E69 CABLE TV (1) : S1-S41 CABLE TV (2) : S01-S05, M1-M10, U1-U10
Picture tube	Hi-Black Trinitron tube Approx. 72.4 cm (Approx. 68 cm picture measured diagonally) 110°-degree deflection
Inputs	1 21-pin connector: CENELEC standard including RGB input. 2 21-pin connector: including S video input
Outputs	21-pin connector: CENELEC standard Headphones jack: stereo minijack Audio output jacks: phono jack (output dependent upon TV settings)
Sound output	15W + 15W
Power consumption	115Wh
Dimensions incl. speakers	Approx. 854 × 555 × 510 mm (w/h/d)
Weight incl. speakers	Approx. 52kg

【RM-816】	
Remote control system	infrared control
Power requirements	3V dc 2 batteries IEC designation R6 (size AA)
Dimensions	Approx. 75 × 221 × 23mm(w/h/d)
Weight	Approx. 230g (including batters)
Accessories supplied	IEC designation R6 batteries (2)
Supplied accessories	RM-816 Remote Commander (1) IEC designation R6 batteries (2)

Design and specifications are subject to change without notice.



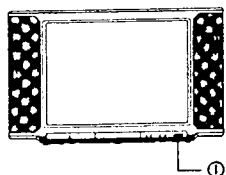
TRINITRON® COLOR TV  
**SONY®**

Note) The layout, etc., will be slightly different from the operating instructions packed with the units.

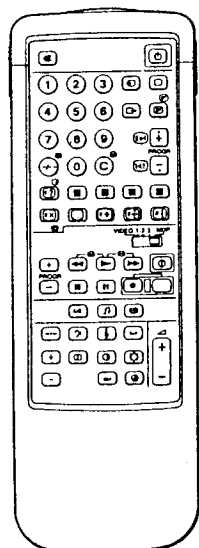
## SECTION 1 GENERAL

### Turning the TV unit ON and OFF

After you have completed the basic preparation your TV is ready to be connected to the mains power supply (220/240V~, 50Hz).



Turning the TV unit ON	
Action	Result
<b>1</b> Press  on the TV.	The TV will turn on. Note: If the screen remains blank, the TV may be in the standby mode. Press  to switch it on.



Turning the TV unit OFF	
A Temporarily	
Press  to enter the standby mode.	The TV will be in the standby mode. To return to the TV mode press .
B Completely	
Press  on the TV set.	The TV will be turned off.

### TV channel presetting

After installing the TV set, TV channels must be preset.

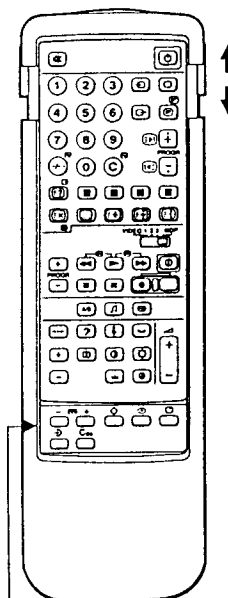
TV broadcasting stations broadcast their programmes on certain fixed frequencies (channels). In order to receive these programmes it is necessary to search for the relevant broadcasting station and to set record it as a channel. The "programme number" is the number that the user decides to associate with a certain channel.

For channel settings there are 60 positions available in the memory. In this way all stations broadcasting within the user's country can be received and recorded as a channel.

#### TV channels automatic presetting

If you are unfamiliar with the transmission frequency of the channels you wish to preset, refer to the section "TV channels automatic presetting". However, if you want to tune them using the frequency of each channel, go to the section "Direct TV channel setting".


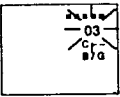

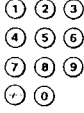
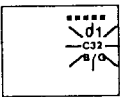

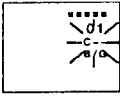
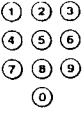
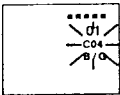


To select a button on the "complete" side, take out the remote control unit from its case to reveal the preset buttons, as shown in the illustration.

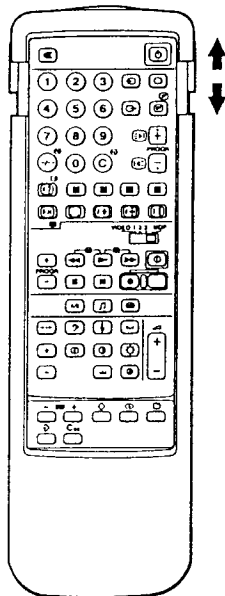


Note: These buttons should be used in preset mode only.

Operation	Result
<b>1</b> Press  to begin the preselection.	The programme number flashes.
<b>2</b> Press <b>PROGR</b> +  or the remote control unit number buttons to select the channel number to which you want to preset the station.  <b>NOTE:</b> To select a 2-figure number press the  button. E.g., if you wish to select number 23, press  first, and then 2 and 3.	The programme number on the screen changes.
<b>3</b> To search for broadcasting stations press  + and - buttons.	When a broadcasting station is tuned correctly, the search will stop. If you want to skip it, press  + or - again.
<b>4</b> Press  to memorize the channel to that which the broadcasting station is tuned.	All data disappears from the screen.
<b>5</b> To memorize other broadcasting stations repeat steps from 1 to 4.	

## Direct TV channel setting

Operation	Result
<b>1</b> Press → to begin the presetting. 	 <p>The programme number begins to flash on the screen.</p>
<b>2</b> Press PROGR + /- or the number buttons on the remote control unit to select the channel number to which you want to preset the station.   <p>Note To select a 2-figure number press -/- button. E.g., if you wish to select number 23, press -/- first, and then 2 and 3.</p>	 <p>The programme number on the screen changes.</p>
<b>3</b> Press C. If you wish to select a cable station, press C twice. 	 <p>Indication "C..." ("S..." for cable stations) flashes on the screen</p>
<b>4</b> By using the number buttons of the remote control unit select the channel number, always with two figures (for "4" press "04").  <p>Note: Press the second number within 5 seconds of the first. After 5 seconds the operation is cancelled.</p>	 <p>The channel number changes on the screen.</p> <p>Note: In case of mistake, the "X" letter appears on the screen. Repeat once more the operation of step 4.</p>
<b>5</b> Press ◊ to memorize the channel to which the station is tuned. 	 <p>All indications disappear from the screen.</p>
To memorize other broadcasting stations repeat the above procedure.	



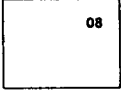

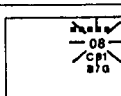

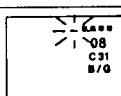


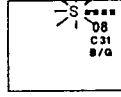

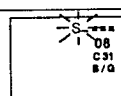

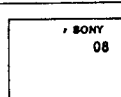


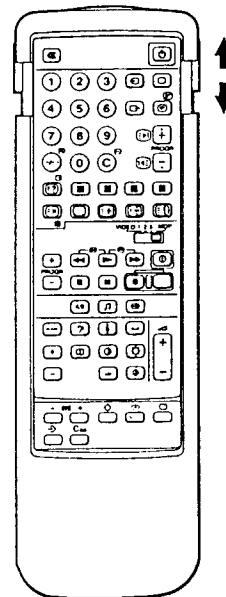
## TV channel presetting

## Broadcasting station identification

By associating a name with a certain broadcasting station it is possible to avoid having to remember, each time, in which channel number that particular station has been memorized.

Five different characters are available for station identification.

Operation	Result
<b>1</b> By using PROGR + or -, or the number keys of the remote control unit, select the programme number to be set for identification.  	 <p>The programme number to be set for identification appears on the screen.</p>
<b>2</b> Press → 	 <p>The number flashes on the screen.</p>
<b>3</b> Press ◻ 	 <p>The first indication line flashes on the screen.</p>
<b>4</b> Press the + or - buttons to select a letter of the alphabet, a number, or a blank space.  	 <p>Alphabetic letters, numbers or a blank space (" ") appear on the screen, in that order.</p>
<b>5</b> Press ◻ 	 <p>In this way the first character has been set, and the following position now flashes on the screen.</p>
<b>6</b> Repeat steps 4 and 5, and fill all five available spaces.	
<b>7</b> Press ◊ 	 <p>All indications disappear from the screen, except the programme number. All indications remaining on the screen have been memorized.</p>




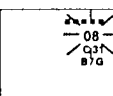



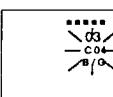

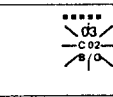

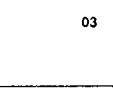
## Temporary channel tuning

It is possible to temporarily memorize a channel, even if it has not been preset.

Operation	Result
<b>1</b> Press C. Press C twice for a cable station.	"C" ("S" for cable stations) indication appears on the screen.
<b>2</b> Using the number keys of the remote control unit select the channel number, always with two figures (e.g., "04" for channel "4").	The channel will be received, but it will not be set as a programme number.

### Skipping channels

Using the PROGR +/- buttons you can skip unused programme numbers. However, the skipped numbers may still be called up using the number buttons.

Operation	Result
<b>1</b> Press $\rightarrow$ to begin presetting. 	 The programme number begins to flash on the screen.
<b>2</b> By using the PROGR + and - buttons, or the number keys of the remote control unit, select the programme number you wish to skip.   	 The programme number changes.
<b>3</b> Press C00 . 	 Under the programme number, the lowest channel number appears.
<b>4</b> Press $\diamond$ . 	 All indications under the programme number disappear from the screen. The skipped programme number will be memorized.

### Manual fine tuning

If the picture is not perfect, it is possible to fine tune it manually.

Operation	Result
Press $\leftarrow$ + or - repeatedly until the picture is at the optimum.	The indication $\leftarrow F \rightarrow$ appears on the screen.
Press $\rightarrow$ to start preselection.	The programme number starts flashing on the screen.
Press $\diamond$ .	Manual fine tuning has been memorized.




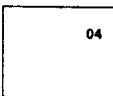
Note: Manual fine tuning will be reset when the channel is selected again.

## Basic functions


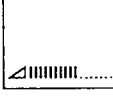
This section introduces you to the basic control functions which are available on the "simple" side of the remote control unit.

### Programme selection

Before selecting programmes make sure that TV channels have been memorized.

Operation	Result
Press PROGR +/- buttons or the number keys of the remote control unit. To select a 2-figure number press +/- button. E.g., if you wish to select number 23, press +/- first, and then 2 and 3.   	 The selected programme number appears on the screen.

### Volume control

Operation	Result
Press $\Delta$ + or -. 	 The volume indication appears on the screen.

### Use of additional functions

#### Use of other functions with the TV set buttons

It is also possible to select programmes and to adjust the volume by using  $P \rightarrow \Delta \rightarrow \oplus$  and  $\rightarrow \bullet \bullet \leftarrow$  + or - buttons, located on the front panel of the TV set. In this case, press first  $P \rightarrow \Delta \rightarrow \oplus$  until the indication P (channel) or  $\Delta$  (volume) appears on the screen, and then press  $\rightarrow \bullet \bullet \leftarrow$  + or - buttons.

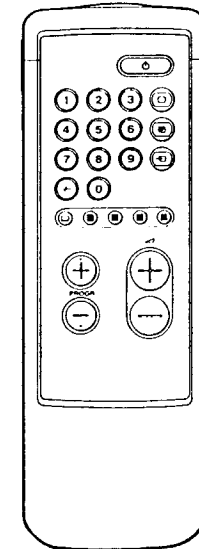
#### Use of teletext service

Press  $\oplus$  . To return to the TV mode, press  $\bigcirc$  . For further information on the teletext service see page 12.

#### Selection of the video input

Press  $\oplus$  . To return to the TV mode, press  $\bigcirc$  . For further details, refer to page 16.

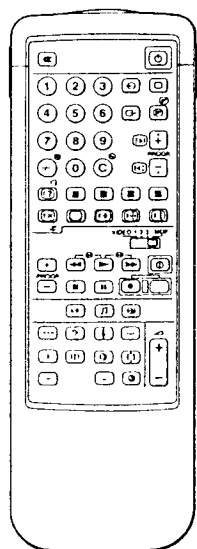
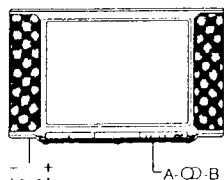
To open, press the arrow  $\downarrow$ .





## Special functions

This section explains the use of functions for adjusting pictures and sound. Use the "complete" side of the remote control unit.

















### Use of special functions

The following functions can be used.

Function	Operation	Reset
Indication display	Press	Press  again.
Sound muting	Press	Press  again.
Language selection for bilingual programmes.	Press A/B. The selected language is displayed by the relevant indication on the screen.	Press A/B.
Sound adjustment for music programmes.	Press	Press  again.
Use of special sound effects.	Press	Press  again.
Time display (only during teletext broadcasting).	Press	Press  again.

### Picture and sound adjustment

Although the picture and sound have been adjusted at the factory, you might want to adjust them to your own taste. To do this, please follow the steps below.

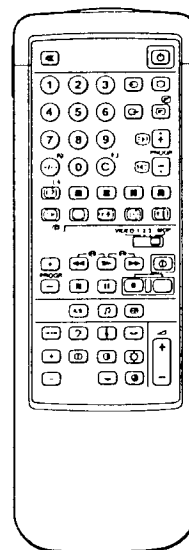
To Adjust:	Press:	Then:	Result: (+ -- -)
Picture:			
Colour Intensity			More ++ Less
Contrast			More ++ Less
Brightness			Bright ++ Dark
Hue (for NTSC only)			Reddish ++ Greenish
Sharpness			More ++ Less
Sound:			
Bass			More ++ Less
Treble			More ++ Less
Balance			Left ++ Right

To reset the picture and sound to factory set levels, press .

On the set: Press the and buttons simultaneously.

## Use of the teletext service

Through the teletext service a great deal of information can be received at any time. Broadcasting stations make this service available through TV broadcasts. To use the teletext service, use the green keys on the "complete" side of the remote control unit. When the "simple" side of the remote control unit is used, only the basic functions are available.








### How to display teletext service

Operation	Result
<b>1</b> Select the channel you want to watch.	The channel changes on the screen.
<b>2</b> Press	If there is no teletext signal, the indication "Page 100" appears on the screen.
<b>3</b> Use the number keys of the remote control unit to insert the three figures corresponding to the desired teletext page. <b>Note</b> In case of a mistake, press any three numbers, and then repeat the operation with the correct numbers.	The selected page number appears on the screen. After a few seconds, the selected page appears on the screen.
To return to normal TV programmes: Press .	
To change teletext channel: First press  to return to the TV mode, and then repeat steps 1 to 3.	

**Note:** A weak TV signal may cause trouble in the use of teletext.

### Use of special teletext functions

Required function	Operation	Result (on the screen)
Page index required.	Press  (INDEX).	Page index appears.
Sub-pages required (page 888).	Press .	The sub-page appears (page 888).
Access to previous or following pages.	Press  (PAGE +) or  (PAGE -).	The preceding or the following page appears.

Required function	Operation	Result (on the screen)
Superimposition of the teletext on the TV programme.	In the TV mode, press <b>⏏</b> twice. To return to the normal teletext function press <b>⏏</b> again.	 Teletext information will appear superimposed on the TV programme.
To prevent page changes due to page updating.	Press <b>⏏</b> (STILL). Press <b>⏏</b> (TXT/MIX) to return to the normal function.	 The <b>⏏</b> (STILL) symbol appears on the screen.
Magnification of teletext characters.	Press <b>⏏</b> once to magnify the upper half of the screen. Press twice to magnify the lower half of the screen. By pressing the button three times the normal vision is restored.	 The upper or the lower half of the page is magnified.
Display of hidden information (answers to quizzes, etc.).	Press <b>⏏</b> (RIV). Press again to hide the answers.	 The information is displayed.
Watching a programme while the teletext searches for the required page.	1. Ask again for the page.	The number is displayed.
	2. Press <b>⏏</b>	TV programme is displayed.
	3. When the required page has been found, the page number will be displayed.	 P201
	4. Press <b>⏏</b> to display the page.	The desired page will be displayed.
Display of a page at a preset time.	1. Request the page.	The selected page will be displayed.
	2. Press <b>⏏</b> (MEM.T).	In the lower part of the screen the indication "T*****" appears.
	3. Set the required time by using the number keys, and by inputting four figures (e.g. 0730 for "7:30").	The required time is displayed on the screen.
	<p>To watch TV programmes until a preset time Press <b>⏏</b> (CANC.). At the required time, the selected page appears in the upper part of the screen. Press <b>⏏</b> to display the page.</p> <p>To cancel the request Display the teletext page and then press <b>⏏</b> (CANC.M.).</p>	

Note: Depending on the teletext service, certain functions may not be available.

## Use of the teletext service

### Use of the FASTEXT function

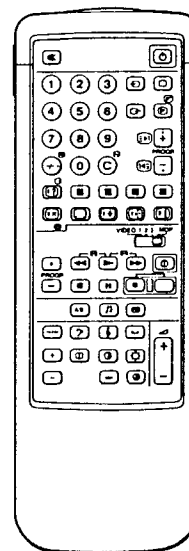
The FASTEXT function allows rapid access, at the touch of a single button, to the teletext functions. In the lower part of the screen, a colour coded index will be displayed when a FASTEXT teletext page is broadcasted. Each colour corresponds to the colored keys on the remote control unit.

#### Operation

Operation	Result
Press one of the coloured keys on the remote control unit corresponding to the coloured indications of the FASTEXT teletext page.	The selected teletext page appears on the screen.

#### Note:

The correct use of the FASTEXT function depends on the signal being broadcast by the TV stations. Some TV stations may not broadcast FASTEXT teletext signal.



## Connections and optional functions

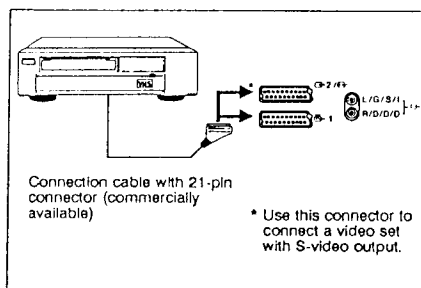
This TV set may be connected to other audio/video machines, such as videocameras, VTRs, videodisc players, or stereo systems.

### Connection to an external audio/video system

This TV set incorporates three groups of connectors, for input and output to the TV signal. Each group has the following characteristics.

Connector	Input signal	Output signal
Ⓔ-1	Normal audio/video signal or RGB signal	TV tuner audio/video signal
Ⓔ-2/Ⓔ-3	Normal audio/video signal and S-video signal	Audio/video signal from a selectable source

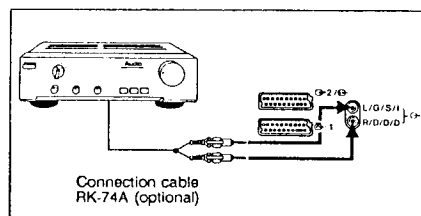
#### Connection of a TV set



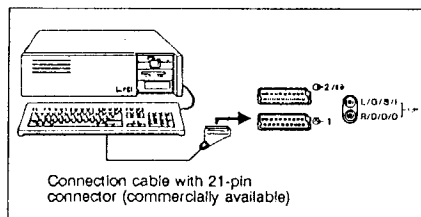
**Connection of a videotape recorder through the T connector**  
Connect the antenna input (AERIAL-IN) of the TV set to the antenna output (AERIAL-OUT) of the videotape recorder.

**Pictures with distortion**  
Move the TV set away from the videotape recorder if pictures or sound become distorted.

#### Connection of an audio unit



#### Connection to a computer with RGB output



## Connections and optional functions

### Video programme playback

Using the input selector, pictures coming from a videotape recorder connected to the TV sets input may be played back.

#### Operation

Operation	Result
Select the desired video input by pressing Ⓔ repeatedly.	Ⓔ 1 The symbol of the selected input appears on the screen (see table below).
Press Ⓔ button to return to TV mode.	

#### Selectable inputs

Symbol	Selected input
Ⓔ 1	Audio/video signal from Ⓔ-1 connector.
Ⓔ 2	RGB signal from Ⓔ-1 connector.
Ⓔ 2	Audio/video signal from Ⓔ-2/Ⓔ-3 connector.
Ⓔ 2	S-video signal (from a VTR with S-video output) from Ⓔ-2/Ⓔ-3 connector.
Input can be selected also with the P-4-Ⓔ buttons of the TV set.	
In this case, first select Ⓔ, and then press the + /- buttons to select the desired input.	

### Selection of video output

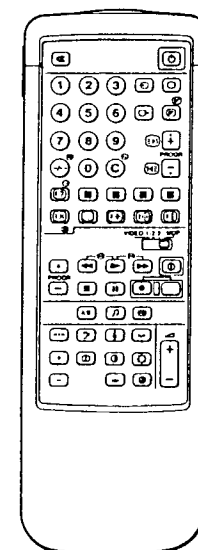
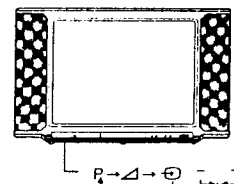
The Ⓔ-2/Ⓔ-3 connector may output 4 video signals. Select the outgoing video signal in the following way.

#### Operation

Operation	Result
Press Ⓔ repeatedly to select the desired video output.	1 Ⓔ The selected video output symbol appears on the screen (see the table following).

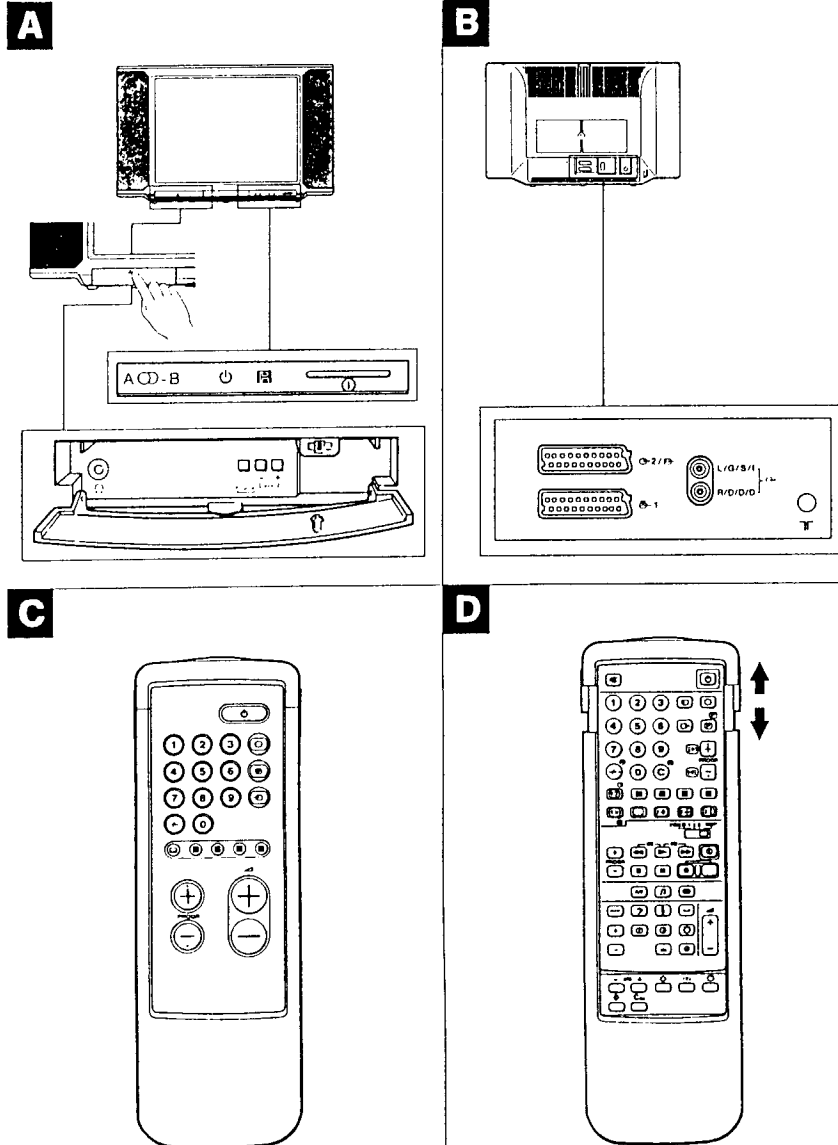
#### Output signal

Symbol	Selected output
1 Ⓔ	Audio/video signal from Ⓔ-1 connector.
2 Ⓔ	Audio/video signal from Ⓔ-2/Ⓔ-3 connector.
TV Ⓔ	Audio/video signal from T-type antenna connector T.



## General information

### Components identification



## General information

This section briefly describes controls of the TV set and the remote control unit, and their relevant functions.

A TV set front panel	
Indication	Description
	Power switch
	Standby switch
A - B	Bilingual function Indications
	Headphones connector (stereo mini-jack)
	Function selector (programme/volume/input)
	Function adjustment keys

B TV set rear panel	
Indication	Description
	Connector 2, Euro AV (SCART, 21-pin). S-video in/video in/TV/video out signals.
	Connector 1, Euro AV (SCART, 21-pin). RGB in/video in/TV/out signals.
	Audio output connectors (RCA pin)
	Antenna connector (of IEC standard)

C Remote control unit — simplified side	
Indication	Description
	Input selector
	Teletext service key
	FASTEXT operation buttons
	TV set power switch and TV mode selector
	Standby key
1,2,3,4,5, 6,7,8,9,0	Number keys
	Channel selection key/ 2-figure programmes
	Volume adjustment key
PROGR +/-	Programme selection key

D Remote control unit — complete side	
Indication	Description
	Sound muting key
	Standby key
1,2,3,4,5, 6,7,8,9,0	Number keys
	Input selector
	TV set power switch and TV mode selector
	Output selector
	Teletext key
	Music programme key
A/B	Bilingual programmes language selection
	Channel selection key/ 2-figure programmes
C	Channel direct selection key
	Special sound effect key
	Time display
	Teletext operation keys
	FASTEXT operation buttons
	Display key
	Reset key
	Volume adjustment keys
PROGR +/-	Programme selection keys
	Image and audio adjustment keys
VIDEO 1/2, MDP	Video unit selector
	Video units function key
	Programme cancelling key
	Channel presetting key
	Channel tuning keys
	Channel storing keys
	Broadcasting stations identification key

This section briefly describes controls of the TV set and the remote control unit, and their relevant functions. For further details see the page shown on the right side of each description.

A TV set front panel	
Indication	Description
	Power switch
	Stand-by switch
A  B	Bilingual function indications
	Headphones connector (stereo mini-jack)
	Function selector (programme/volume/input)
	Function adjustment keys

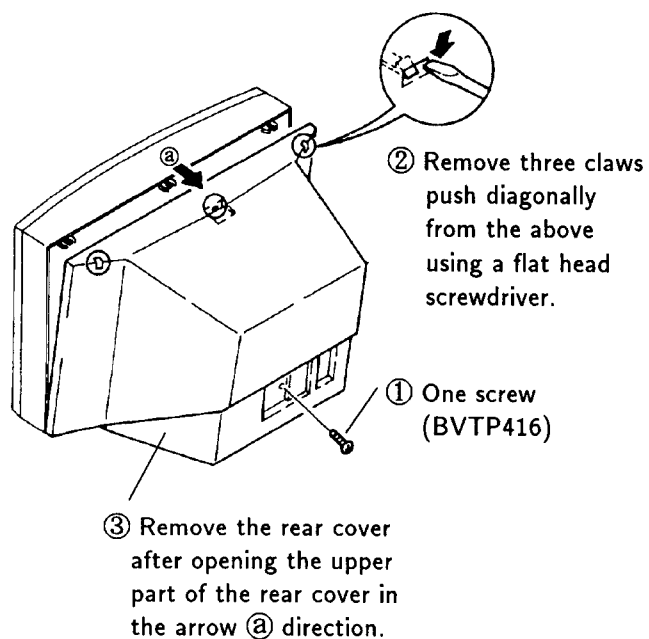
B TV set rear panel	
Indication	Description
	Connector 2, Euro AV (SCART, 21-pin). S-video in/video in/TV/video out signals.
	Connector 1, Euro AV (SCART, 21-pin). RGB in/video in/TV/out signals.
	Audio output connectors (RCA pin)
	Antenna connector (of IEC standard)

C Remote control unit — simplified side	
Indication	Description
	Input selector
	Teletext service key
	TV set power switch and TV mode selector
	Standby key
1,2,3,4,5,6,7,8,9,0	Number keys
-/--	Channel selection key/ 2-figure programmes
	Volume adjustment key
PROGR +/-	Programme selection key

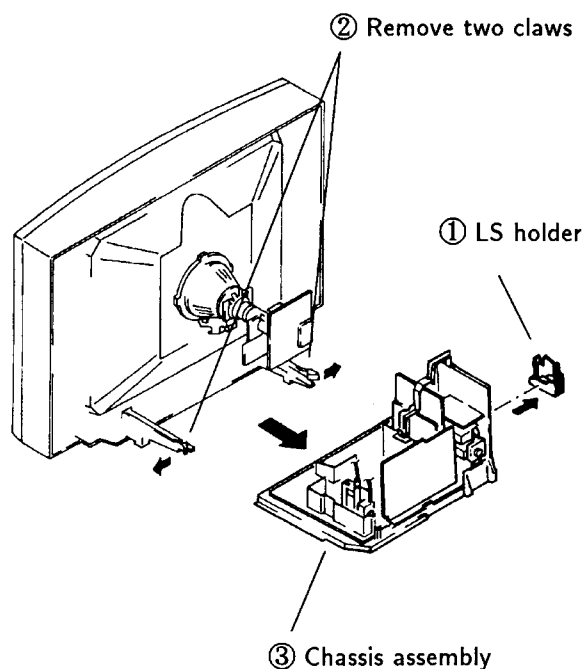
D Remote control unit — complete side	
Indication	Description
	Sound muting key
	Standby key
1,2,3,4,5,6,7,8,9,0	Number keys
	Input selector
	TV set power switch and TV mode selector
	Output selector
	Teletext key
	Music programme key
A/B	Bilingual programmes language selection
-/--	Channel selection key/ 2-figure programmes
C	Channel direct selection key
	Special sound effect key
	Time display
	Teletext operation keys
	Display key
	Reset key
	Volume adjustment keys
PROGR +/-	Programme selection keys
	Image and audio adjustment keys
MEM	MEM light indication
USE/MEM	Normal/programme mode selector
VIDEO 1/2, MDP	Video unit selector
	Video units function key
Coo	Programme cancelling key
	Channel presetting key
+	Channel tuning keys
	Channel storing keys
	Broadcasting stations identification key
RESET	Cancel key

## SECTION 2 DISASSEMBLY

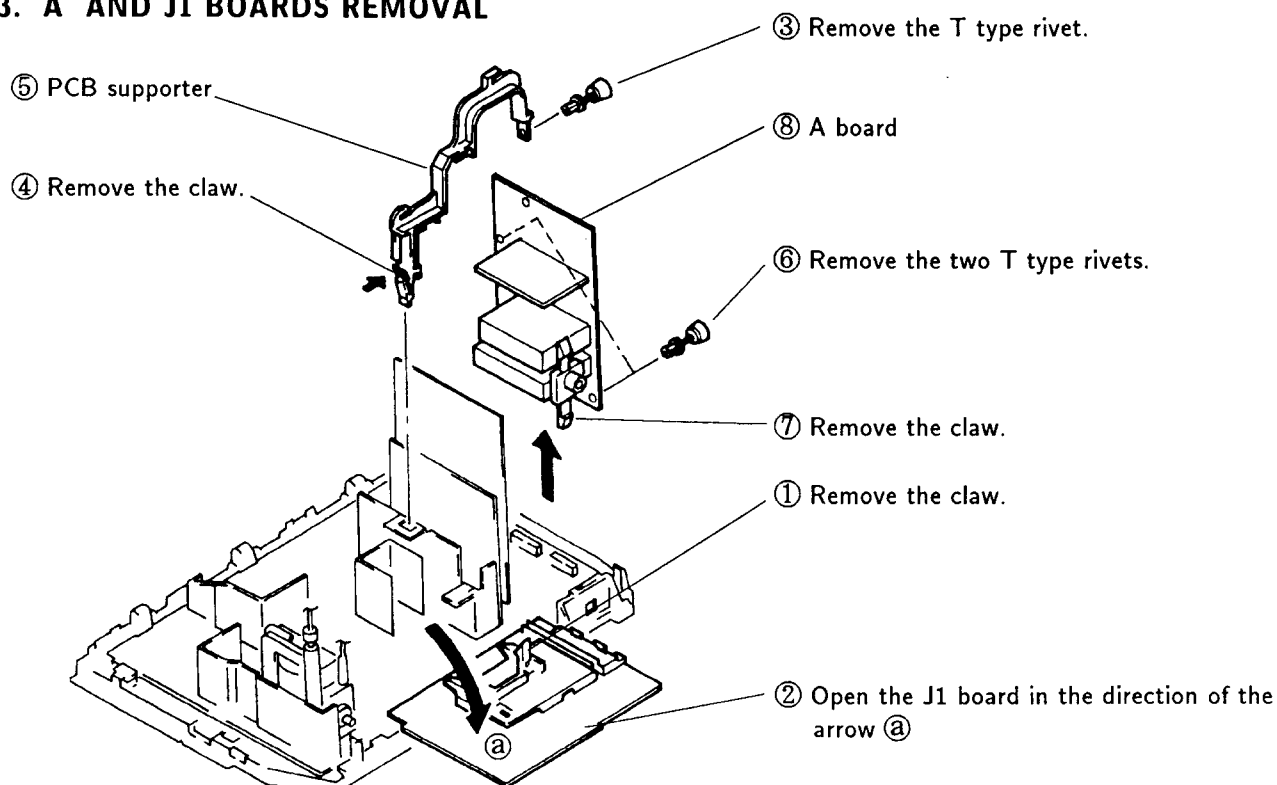
### 2-1. REAR COVER REMOVAL



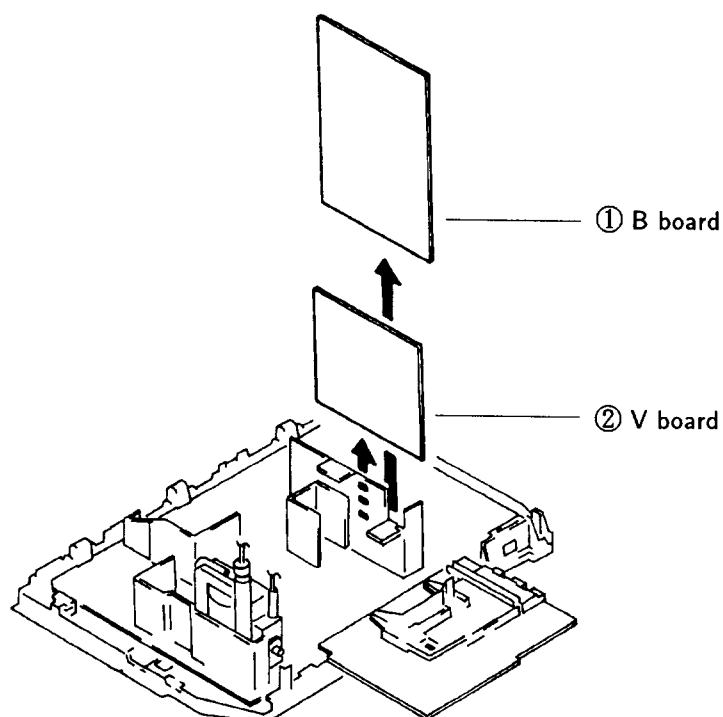
### 2-2. CHASSIS ASSEMBLY REMOVAL



### 2-3. A AND J1 BOARDS REMOVAL



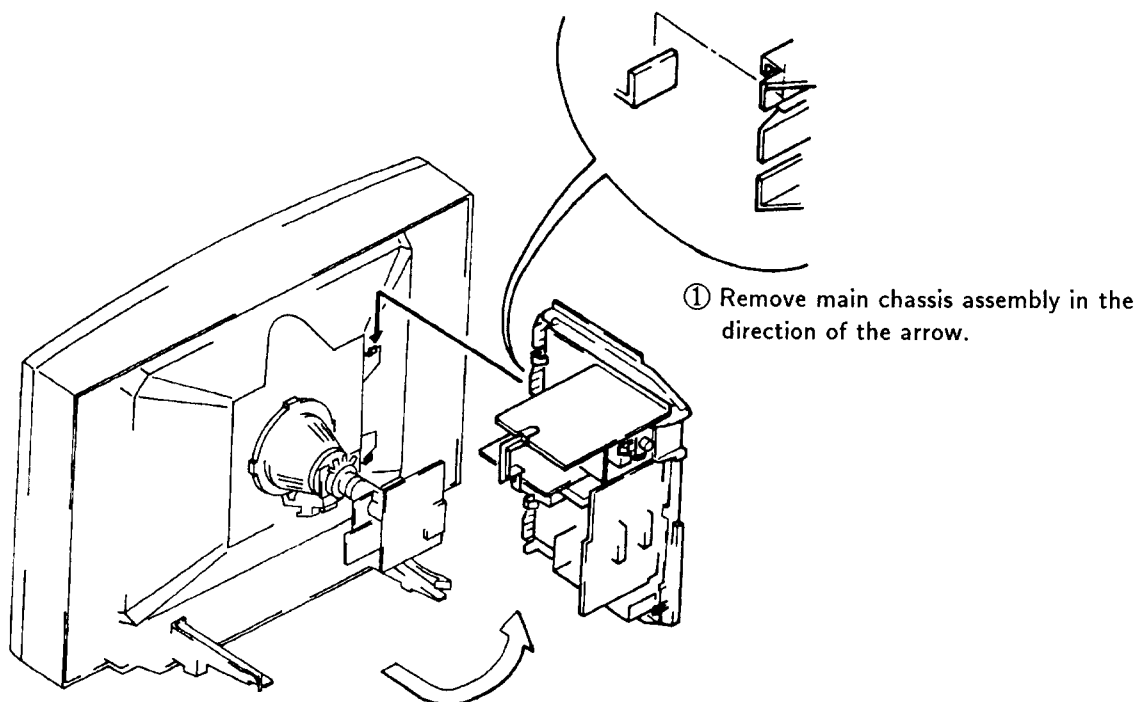
## 2-4. B AND V BOARDS REMOVAL



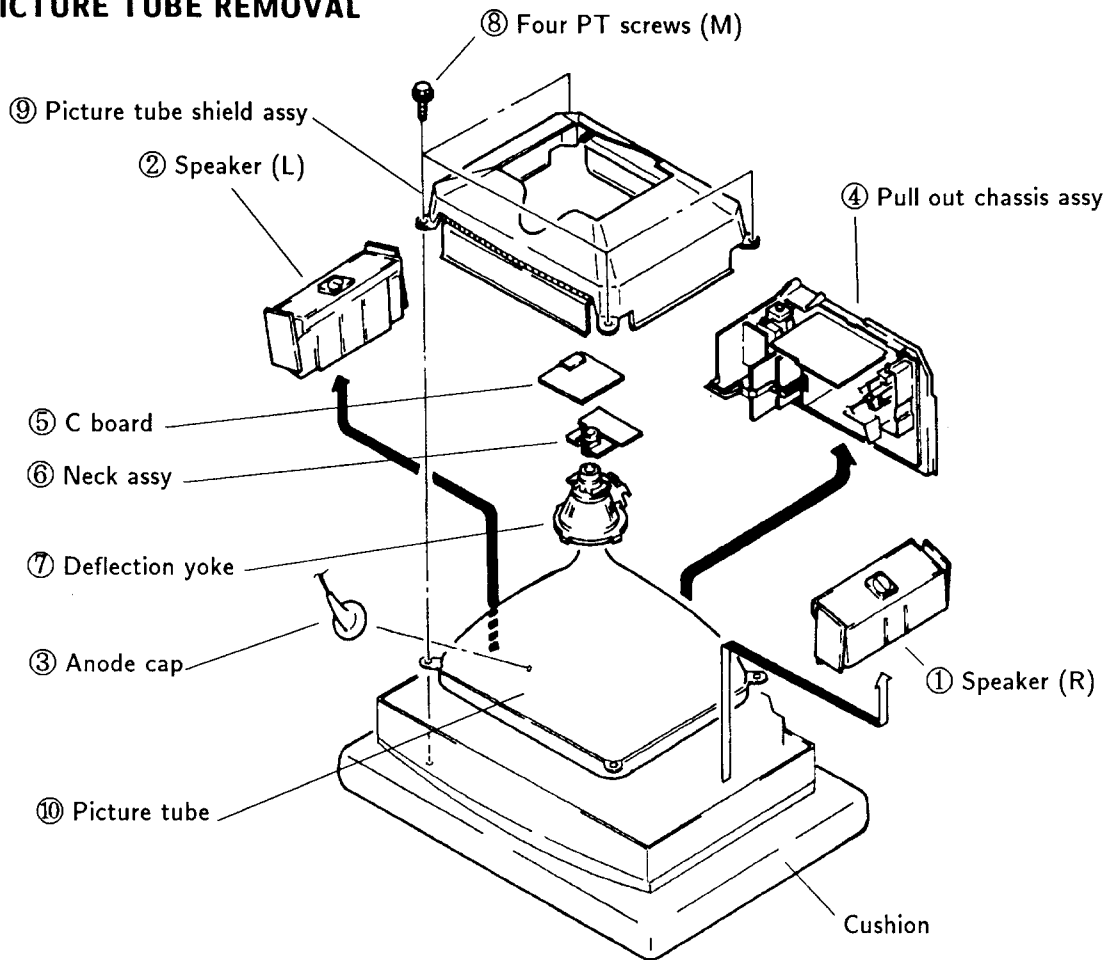
Note : 10 pin extension cable (S-0945-001-0)

## 2-5. SERVICE POSITION

- \* Remove the connector bracket from the main chassis assembly and then perform the following servicing.  
(Refer to 2-2. CHASSIS ASSEMBLY REMOVAL.)

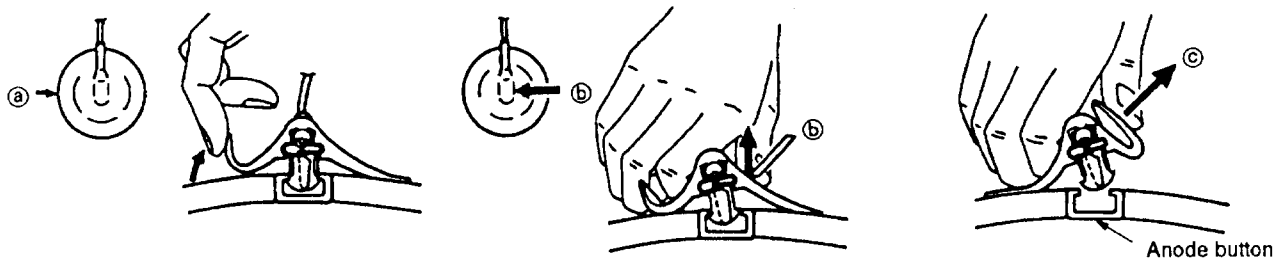


## 2-6. PICTURE TUBE REMOVAL



### • REMOVAL OF ANODE-CAP

#### • REMOVING PROCEDURES



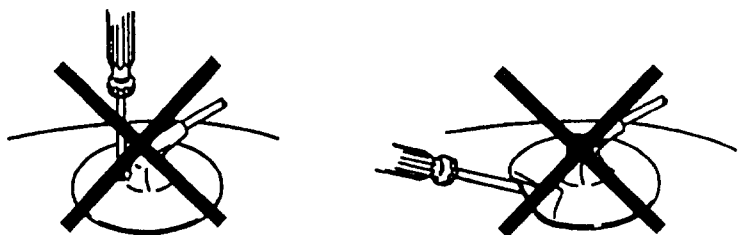
① Turn up one side of the rubber cap in the direction indicated by the arrow ①.

② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②.

③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ③.

#### • HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardy not to hurt inside of anode-caps!  
A material fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardy!  
The shatter-hook terminal will stick out or hurt the rubber.





## SECTION 3 SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there is specific instruction to the contrary, carry out these adjustments with the rated power supply.
- Unless there is specific instruction to the contrary, set the controls and switches this way:
  - Contrast .....80%  
(or remote control normal)
  - ⚙ Brightness .....50%

- Carry out the following adjustments in this order:

1. Beam landing
2. Convergence
3. Focus
4. White balance

**Note:** Testing equipment required

1. Color bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

### Preparations :

- In order to reduce the influence of geomagnetism on the set's picture tube face it east or west.
- Switch on the set's power and degauss with the degausser.

### 3-1. BEAM LANDING

1. Input the white signal with the pattern generator.
 

Contrast	}	normal
Brightness		
2. Position neck ass'y as shown in Fig 3-2.
3. Set the pattern generator raster signal to red.
4. Move the deflection yoke to the rear and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side.  
(See Figures 3-1 through 3-3.)
5. Move the deflection yoke forward and adjust so that entire screen is red. (See Figure 3-1.)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners; use a magnet to adjust it.  
(See Figure 3-4.)

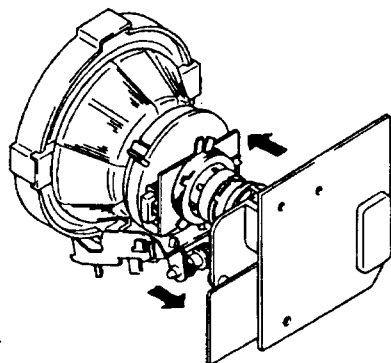


Fig. 3-1

Fig. 3-2

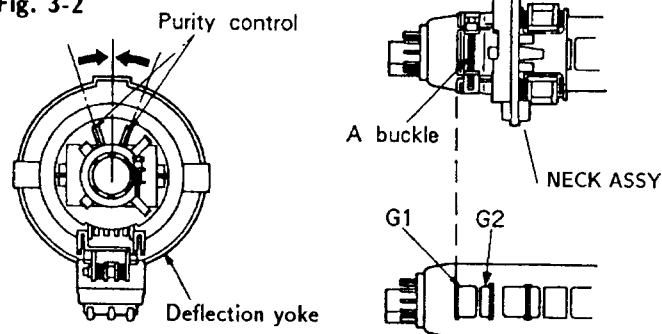


Fig. 3-3

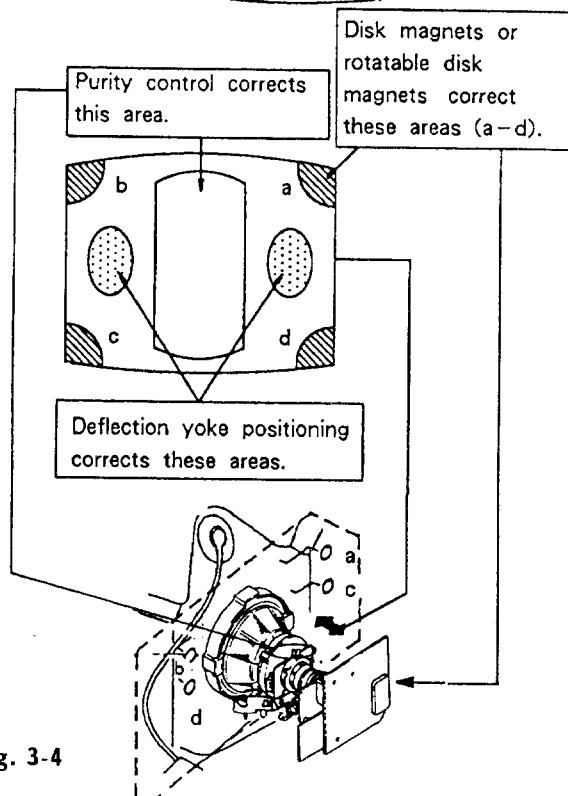
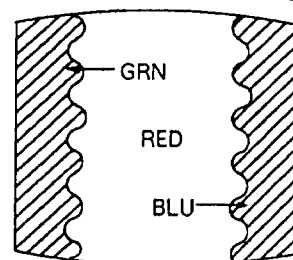


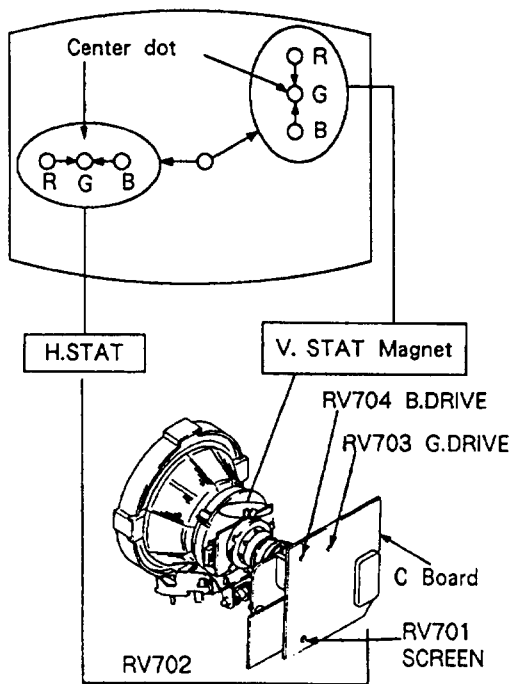
Fig. 3-4

### 3-2. CONVERGENCE

#### Preparations :

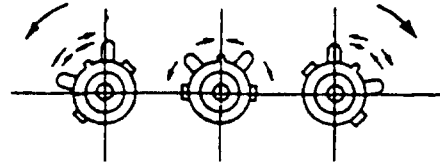
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

#### (1) Horizontal and vertical static convergence

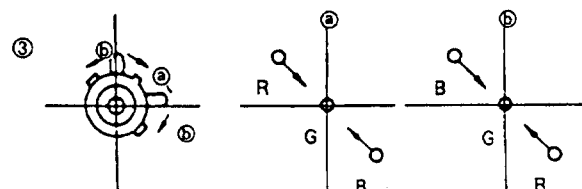
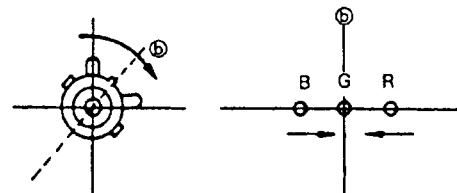
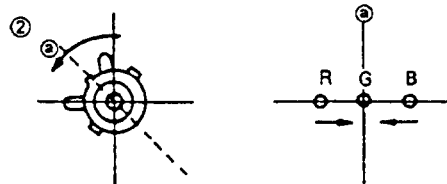
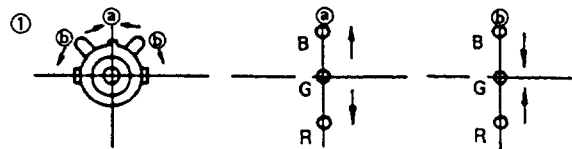


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V. STAT magnet in the manner given below. (In this case, the H.STAT variable resistor and the V. STAT magnet influence each other)

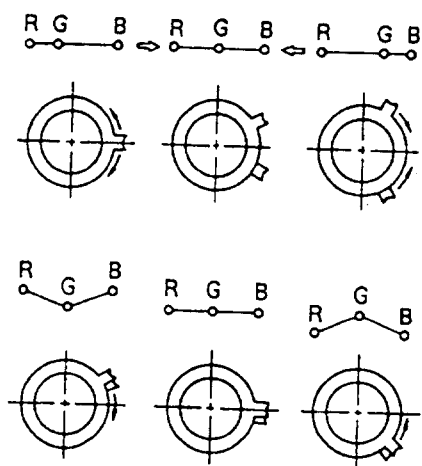
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



4. If the V.STAT magnet is moved in the direction of the ① and ② arrows, the red, green, and blue points move as shown below.

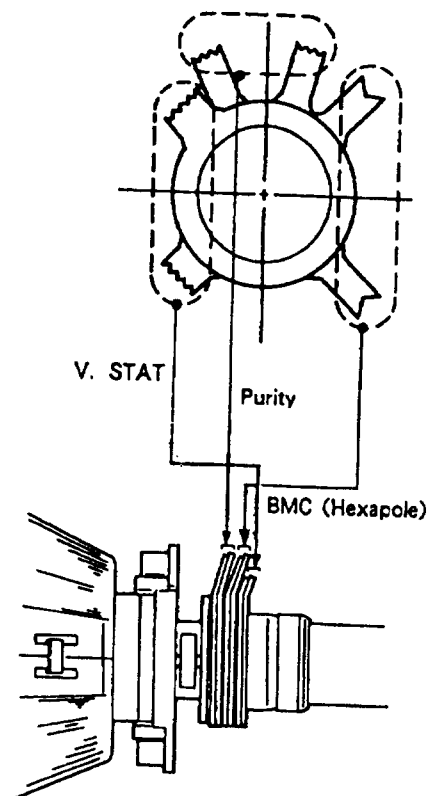


● Operation of BMC (Hexapole) Magnet



- The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking.

Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).



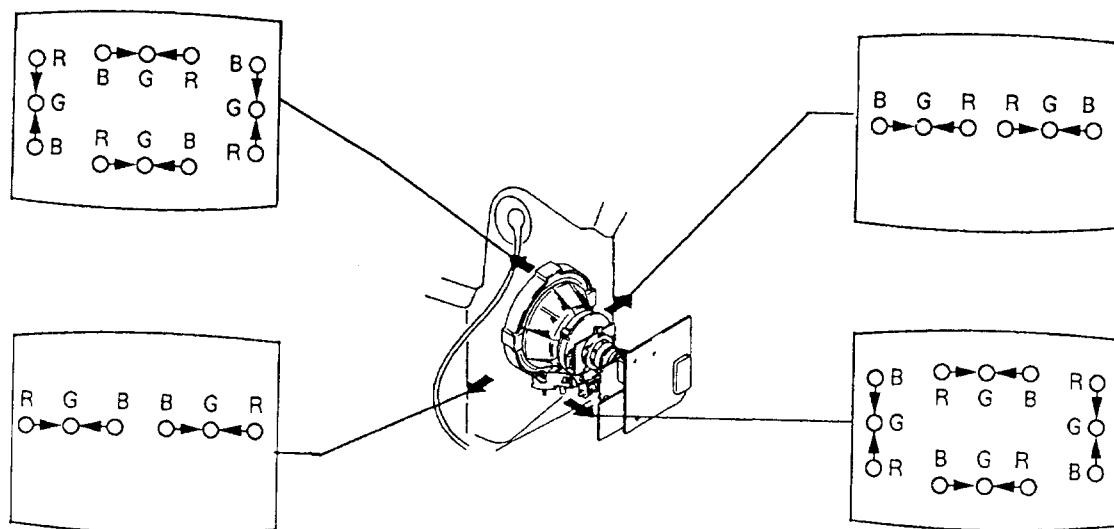
(2) Dynamic convergence adjustment

Preparations :

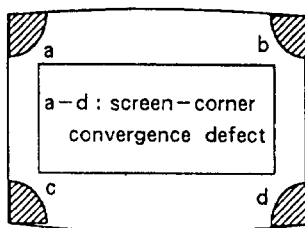
Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.

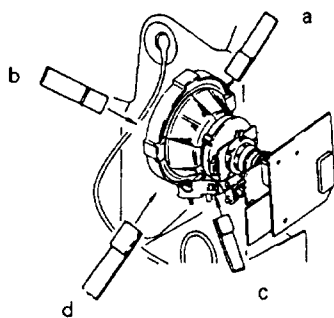
3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Install the defelection yoke spacer.



### (3) Screen corner convergence



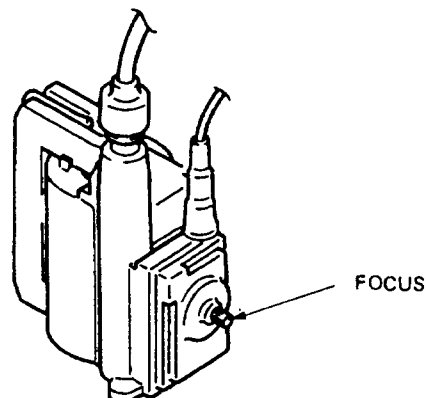
Install the permalloy assembly for the section with faulty.



Permalloy

### 3-3. FOCUS

Adjust the focus to optimize the screen.



### 3-4. WHITE BALANCE

#### [ Screen G2 setting ]

1. Input the dot signal from the pattern generator.
2. Set the picture brightness control to its lowest level.
3. Apply 170V DC to the R, G, and B cathodes with an external power supply.
4. While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

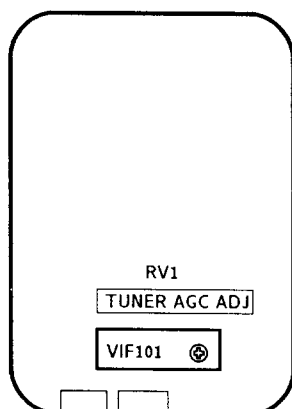
#### [ White balance adjustment ]

1. Input an all-white signal from the pattern generator.
2. Set the picture brightness and color controls to their normal levels.
3. Use the RV704 (B Drive) and RV703 (G Drive) to adjust white balance.

In the adjustments below, have the picture color and brightness settings at their normal levels unless there is a specific instruction to the contrary.

## SECTION 4 CIRCUIT ADJUSTMENTS

### 4-1. A BOARD ADJUSTMENTS

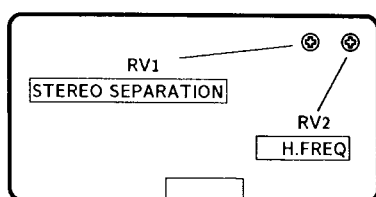


A BOARD (COMPONENT SIDE)

#### TUNER AGC ADJUSTMENT (VIF101, RV1)

1. Align with an appropriate signal between stations.
2. Adjust RV1 so that snow noise and cross modulation just disappear from the picture.

### IFG5.5S SIF



IFG5.5S SIF -component side-

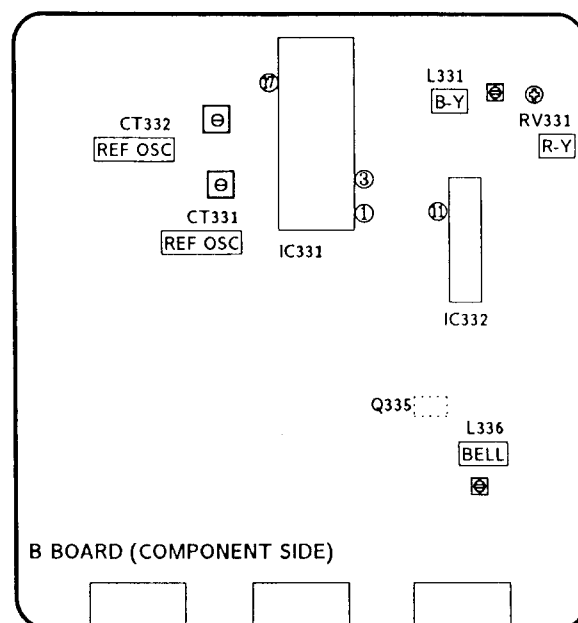
#### STEREO SEPARATION ADJUSTMENT (RV1)

1. Input stereo signals. (L-CH 400Hz, R-CH 1KHz)
2. Check the stereo indicator.
3. Connect on oscilloscope to pin⑧ (CH1) of CN1 through band pass filter of 1KHz
4. Adjust RV1 so that 1KHz voltage goes down to the minmum.

#### H FREQ (RV2)

1. Input a PAL COLOR BAR signal, then connect a jumper between pin⑫ IC4 and GND.
2. Connect a frequency counter to pin④ IFG5.5S (HP) of CN1 through a probe of 10 : 1.
3. Adjust RV2 (H.FREQ)  $15.625 \pm 50\text{Hz}$ .
4. After adjustment, remove the jamper.

### 4-2. B BOARD ADJUSTMENTS



B BOARD (COMPONENT SIDE)

#### REFERENCE OSCILLATOR ADJUSTMENT (CT332 8.8MHz)

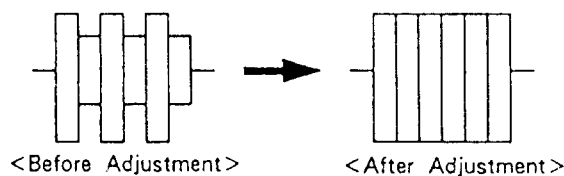
1. Input a PAL color bar signal.
2. Ground pin ⑪ of the IC331.
3. Adjust CT332 to obtain synchronization.

#### REFERENCE OSCILLATOR ADJUSTMENT (CT331 7.16MHz)

1. Input an NTSC3.58 color bar signal.
2. Ground pin ⑪ of IC331.
3. Adjust the CT331 to obtain synchronization.
4. Remove the jumper grounding pin ⑪ of IC331.

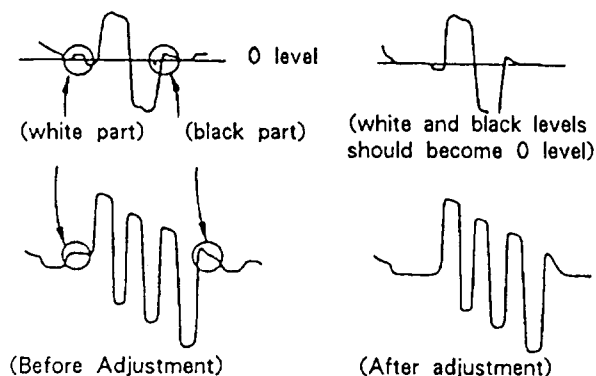
#### BELL FILTER ADJUSTMENT (L336)

1. Input a SECAM color bar signal.
2. Connect the oscilloscope to the emitter of Q335.
3. Adjust L336 so that the waveform is flat.

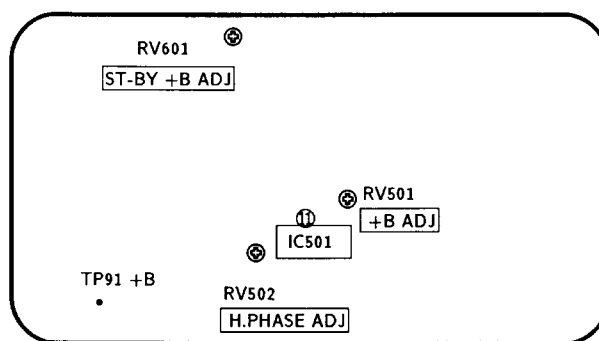


### DISCRIMINATION ADJUSTMENTS (RV331 and L331)

1. Input a SECAM color bar signal.
2. Connect the oscilloscope to pin ① of IC331.
3. Adjust RV331 until the white and black sections of the waveform at pin ① are at the 0 level.  
Connect the oscilloscope to pin ③ of IC331.
4. Adjust L331 until the white and black sections of the waveform at pin ③ are at the 0 level.
5. the waveform at pin ③ are at the 0 level.



### 4-3. D BOARD ADJUSTMENTS



D BOARD (COMPONENT SIDE)

#### +B ADJUSTMENT (RV501)

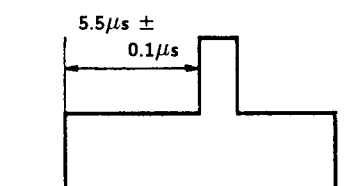
1. Connect the digital multimeter to TP91.
2. Adjust RV501 to obtain  $135 \pm 0.2V$ .

#### ST-BY +B ADJUSTMENT (RV601)

1. Put the system into  $\text{⏻}$  standby mode (remote commander).
2. Connect the digital multimeter to TP91.
3. Adjust RV601 to obtain  $135 \pm 3V$ .
4. Take the system out of  $\text{⏻}$  standby mode (remote commander).

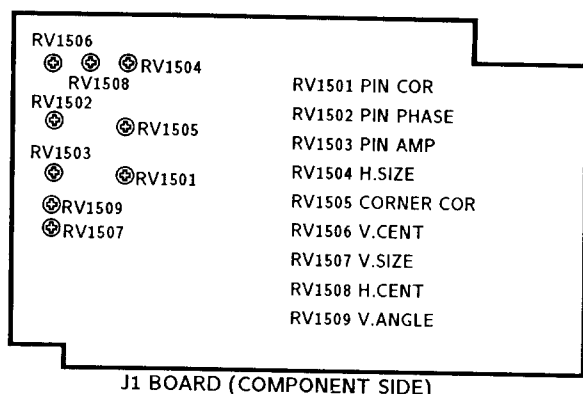
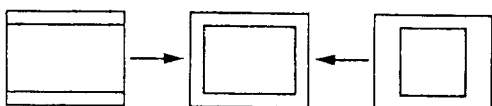
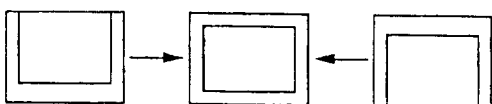
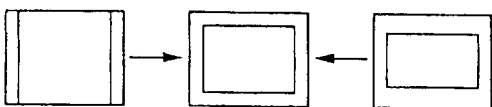
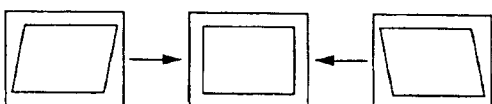
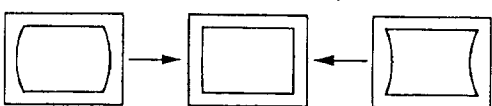
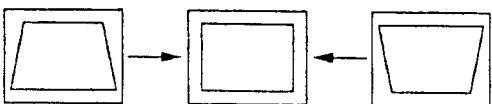
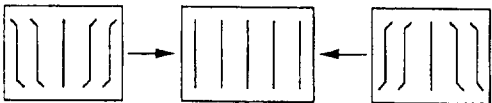
#### H.PHASE ADJUSTMENT (RV502)

1. Input a PAL color bar signal.
2. Set the picture and brightness controls to their normal levels.
3. Set RV1508 (H.CENT) to its mechanical center.
4. Connect the oscilloscope to pin ⑪ (SCP) of IC 501.
5. Rotate RV502 to adjust to  $5.5\mu s \pm 0.1\mu s$ .

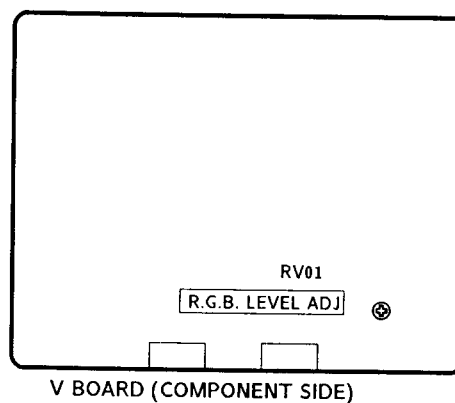


Standard of H. PHASE

## 4-4. J1 BOARD ADJUSTMENTS

RV1508  
H. CENT (HORIZONTAL CENTER)RV1504  
H. SIZE (HORIZONTAL SIZE)RV1506  
V. CENT (VERTICAL CENTER)RV1507  
V. SIZE (VERTICAL SIZE)RV1509  
V. ANGLE (VERTICAL ANGLE)RV1503  
PIN AMP (PINCUSHION AMPLIFIER)RV1502  
PIN PHASE (PINCUSHION PHASE)RV1501  
PIN. COR (PINCUSHION CORRECT)RV1505  
CORNER COR (CORNER CORRECT)

## 4-5. V BOARD ADJUSTMENT

**RGB LEVEL ADJUSTMENT (RV01)**

1. Maximize the picture setting.
2. Adjust RV01 so that the RGB output is 0.75V.

## 4-6. SECONDARY ADJUSTMENTS

### SUB BRIGHTNESS ADJUSTMENT

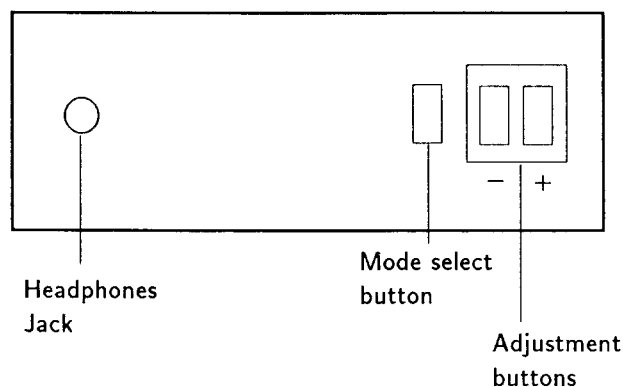
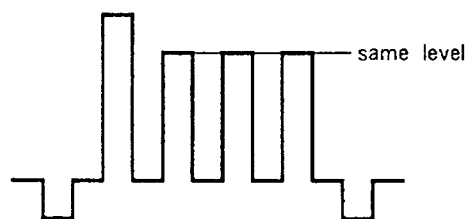
1. Set the system to receive a test pattern.
2. Press  $\rightarrow \bullet \leftarrow$  on the remote commander to put the system into normal mode.
3. Switch off the power.
4. While depressing the adjusting buttons + and - simultaneously, turn on the power. (SUB mode is obtained)
5. Minimize the  $\bullet$  contrast setting.
6. Adjust the  $\odot$  brightness control so that the gray scale 0 IRE section is cut off completely and the 20 IRE section is barely glowing.
7. Depress the  $\diamond$  (store) button of the remote commander.  
(SUB mode is released)

If there is no test color pattern

1. Set the system to receive a color pattern.
2. Press  $\rightarrow \bullet \leftarrow$  on the remote commander to put the system into normal mode.  
Set the  $\odot$  color to its normal state.
- 3-5. Steps are the same as above.
6. Since 20 IRE is nearly blue, adjust the  $\odot$  brightness control so that the blue barely glows.
7. Same as step 7 above.
8. Press  $\rightarrow \bullet \leftarrow$  on the remote commander to put the system into normal mode.

### SUB COLOR ADJUSTMENT

1. Set the system to receive color bars.
2. Press  $\rightarrow \bullet \leftarrow$  on the remote commander to put the system into normal mode.
3. Cut off the power.
4. While depressing the adjustment buttons + and - simultaneously, turn on the power. (SUB mode is obtained).
5. Adjust the color control so that the B out waveform (pin ⑤ of C board connector CNC72) is as shown in the figure below.
6. Depress the  $\diamond$  (store) button of the remote commander. (SUB mode is released)





# KV-C2551D/C2951D

## RM-816

## SERVICE MANUAL

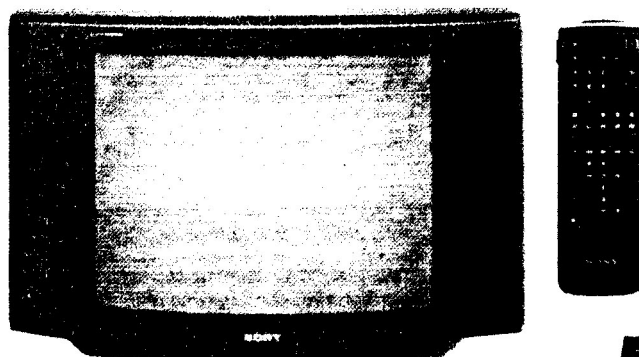
*AEP Model*

KV-C2551D

Chassis No. SCC-E18G-A

KV-C2951D

Chassis No. SCC-E18F-A



## AE-1C CHASSIS

### MODELS OF THE SAME SERIES

KV-C2551D/C2951D

KV-A2111D/A2511D

KV-E2521D/E2921D

### SPECIFICATIONS

【KV-C2551D/C2951D】

Television system: B/G/H  
 Color system: PAL, SECAM, NTSC3.58, NTSC4.43  
 Stereo system: GERMAN stereo  
 Channel coverage: VHF: E2-E12 UHF: E21-E69  
 CABLE TV (1): S1-S41  
 CABLE TV (2): S01-S05, M1-M10, U1-U10  
 Picture tube: Black Trinitron tube  
 Approx. 63.5 cm (25 inches)  
 (Approx. 59 cm picture measured diagonally)  
 110° -degree deflection  
 Approx. 72.4 cm (29 inches)  
 (Approx. 68 cm picture measured diagonally)  
 110° -degree deflection  
 Inputs: 1 21-pin connector:  
 CENELEC standard including RGB input.  
 2 21-pin connector:  
 including S video input  
 Front: 3 Audio and video input jacks:  
 phono jack.  
 Including S Video input  
 Y: 1Vp-p ± 3dB 75ohm  
 C: 0.3Vp-p ± 3dB 75ohm

#### Outputs

Sound output

Power consumption

Dimensions incl. speakers

Weight incl. speakers

21-pin connector: CENELEC standard  
 Headphones jack: stereo minijack  
 External speaker terminals: 2-pin DIN  
 Audio output jacks: phono jack (output dependent upon TV settings)  
 30 W + 30 W  
 95Wh (KV-C2551D)  
 105Wh (KV-C2951D)  
 Approx. 769 × 495 × 478 mm (w/h/d) (KV-C2551D)  
 Approx. 854 × 555 × 510 mm (w/h/d) (KV-C2951D)  
 Approx. 38kg (KV-C2551D)  
 Approx. 52kg (KV-C2951D)

-Continued on next page-




# TRINITRON® COLOR TV

# SONY®

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## SAFETY-RELATED COMPONENT WARNING !!

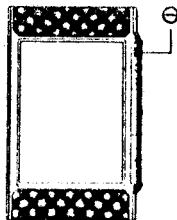
COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.



Note The layout, etc., will be slightly different from the operating instructions packed with the units.

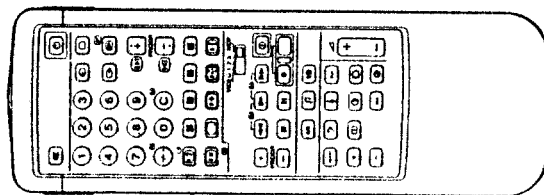
## SECTION 1 GENERAL




### Turning the TV unit ON and OFF

After you have completed the basic preparation your TV is ready to be connected to the mains power supply (220/240V~, 50Hz).



Turning the TV unit ON	
Action	Result
<b>1</b> Press  on the TV	The TV will turn on. Note: If the screen remains blank, the TV may be in the standby mode. Press  to switch it on.



Turning the TV unit OFF	
<b>A Temporarily</b> Press  to enter the standby mode.	The TV will be in the standby mode. To return to the TV mode press  .
<b>B Completely</b> Press  on the TV set.	The TV will be turned off.

### TV channel presetting

After installing the TV set, TV channels must be preset.









TV broadcasting stations broadcast their programmes on certain fixed frequencies (channels). In order to receive these programmes it is necessary to search for the relevant broadcasting station and to set record it as a channel. The "programme number" is the number that the user decides to associate with a certain channel.

For channel settings there are 60 positions available in the memory. In this way all stations broadcasting within the user's country can be received and recorded as a channel.

#### TV channels automatic presetting

If you are unfamiliar with the transmission frequency of the channels you wish to preset, refer to the section "TV channels automatic presetting". However, if you want to tune them using the frequency of each channel, go to the section "Direct TV channel setting".

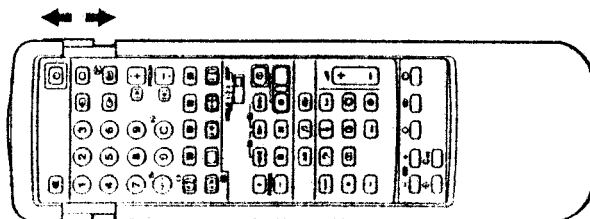
To select a button on the "complete" side, take out the remote control unit from its case to reveal the preset buttons, as shown in the illustration.

Operation	Result
<b>1</b> Press  to begin the preselection.	The programme number flashes.
<b>2</b> Press <b>PROGR</b> +  or the remote control unit number buttons to select the channel number to which you want to preset the station.  1 2 3 4 5 6 7 8 9 0	The programme number on the screen changes.
<b>NOTE:</b> To select a 2-figure number press the  button. E.g., if you wish to select number 23, press  first, and then 2 and 3.	
<b>3</b> To search for broadcasting stations press  + and - buttons.	When a broadcasting station is tuned correctly, the search will stop. If you want to skip it, press  + or - again.
<b>4</b> Press  to memorize the channel to that which the broadcasting station is tuned.	All data disappears from the screen.
<b>5</b> To memorize other broadcasting stations repeat steps from 1 to 4.	

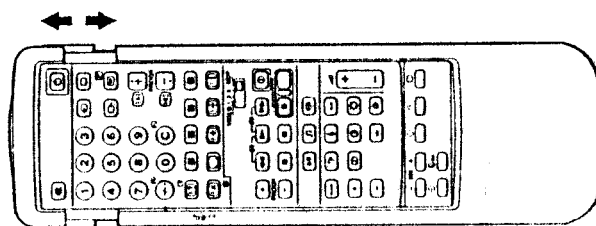
Note: These buttons should be used in preset mode only.

## TV channel presetting

Direct TV channel setting		
Operation		Result
<b>1</b> Press → to begin the presetting.	→	The programme number begins to flash on the screen.
<b>2</b> Press PROG + /- or the number buttons on the remote control unit to select the channel number to which you want to preset the station.	<div> <div>PROG</div> <div>+</div> <div>-</div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> <div>0</div> </div>	The programme number on the screen changes.
<b>Note:</b> To select a 2-figure number press +/- button. E.g., if you wish to select number 23, press +/- first, and then 2 and 3.		
<b>3</b> Press C. If you wish to select a cable station, press C twice.	C	Indication "C-" ("S-" for cable stations) flashes on the screen.
<b>4</b> By using the number buttons of the remote control unit select the channel number, always with two figures (for "4" press "04").	<div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> <div>0</div> </div>	The channel number changes on the screen.
<b>Note:</b> Press the second number within 5 seconds of the first. After 5 seconds the operation is cancelled.		
<b>5</b> Press → to memorize the channel to which the station is tuned.	→	All indications disappear from the screen.



Broadcasting station identification		
By associating a name with a certain broadcasting station it is possible to avoid having to remember, each time, in which channel number that particular station has been memorized. Five different characters are available for station identification.		
Operation		Result
<b>1</b> By using PROG + or -, or the number keys of the remote control unit, select the programme number to be set for identification.	<div> <div>PROG</div> <div>+</div> <div>-</div> <div>0</div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> </div>	The programme number to be set for identification appears on the screen.
<b>2</b> Press →	→	The number flashes on the screen.
<b>3</b> Press C	C	The first indication line flashes on the screen.
<b>4</b> Press the + or - buttons to select a letter of the alphabet, a number, or a blank space.	<div> <div>+</div> <div>-</div> </div>	Alphabetic letters, numbers or a blank space (" ") appear on the screen, in that order.
<b>5</b> Press C	C	In this way the first character has been set, and the following position now flashes on the screen.
<b>6</b> Repeat steps 4 and 5, and fill all five available spaces.		
<b>7</b> Press C	C	All indications disappear from the screen, except the programme number. All indications remaining on the screen have been memorized.
Temporary channel tuning		
It is possible to temporarily memorize a channel, even if it has not been preset.		
Operation		Result
<b>1</b> Press C. Press C twice for a cable station.	C	"C" ("S" for cable stations) indication appears on the screen.
<b>2</b> Using the number keys of the remote control unit select the channel number, always with two figures (e.g., "04" for channel "4").		The channel will be received, but it will not be set as a programme number.

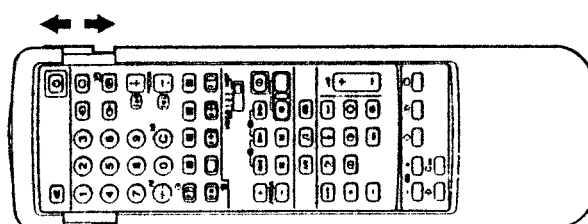


## Basic functions

**Skipping channels**

Using the PROGR +/- buttons you can skip unused programme numbers. However, the skipped numbers may still be called up using the number buttons.

Operation	Result
1 Press → to begin presetting.	The programme number begins to flash on the screen.
2 By using the PROGR + and - buttons, or the number keys of the remote control unit, select the programme number you wish to skip.	The programme number changes.
3 Press C00.	Under the programme number, the lowest channel number appears.
4 Press ◊.	All indications under the programme number disappear from the screen. The skipped programme number will be memorized.



### Manual fine tuning

If the picture is not perfect, it is possible to fine tune it manually.

Operation	Result
Press [F] + or - repeatedly until the picture is at its optimum.	The indication →F→ appears on the screen.
Press → to start preselection.	The programme number starts flashing on the screen.
Press ◊.	Manual line tuning has been memorized.

**Note:** Manual line tuning will be reset when the channel is selected again.

This section introduces you to the basic control functions which are available on the "simple" side of the remote control unit.

### Programme selection

Before selecting programmes make sure that TV channels have been memorized.

Operation	Result
Press PROGR +/- buttons or the number keys of the remote control unit. To select a 2-figure number press +/- button. E.g., if you wish to select number 23, press +/- first, and then 2 and 3.	The selected programme number appears on the screen.

### Volume control

Operation	Result
Press ∇ + or -.	The volume indication appears on the screen.

### Use of additional functions

#### Use of other functions with the TV set buttons

It is also possible to select programmes and to adjust the volume by using P → ∇ → ◊ and → + or - buttons, located on the front panel of the TV set. In this case, press first P → ∇ → ◊ until the indication P (channel) or ∇ (volume) appears on the screen, and then press → + or - buttons.

#### Use of teletext service

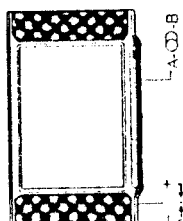
Press ◊. To return to the TV mode, press ◊. For further information on the teletext service see page 12.

#### Selection of the video input

Press ◊. To return to the TV mode, press ◊. For further details, refer to page 15.

## Special functions

This section explains the use of functions for adjusting pictures and sound. Use the "complete" side of the remote control unit.



### Use of special functions

The following functions can be used.

Function	Operation	Result
Indication display	Press <b>C</b>	Press <b>C</b> again.
Sound muting	Press <b>M</b>	Press <b>M</b> again.
Language selection for bilingual programmes.	Press A/B. The selected language is displayed by the relevant indication on the screen.	Press A/B.
Sound adjustment for music programmes.	Press <b>L</b>	Press <b>L</b> again.
Use of special sound effects.	Press <b>E</b>	Press <b>E</b> again.
Time display (only during teletext broadcasting).	Press <b>T</b>	Press <b>T</b> again.

### Picture and sound adjustment

Although the picture and sound have been adjusted at the factory, you might want to adjust them to your own taste. To do this, please follow the steps below.

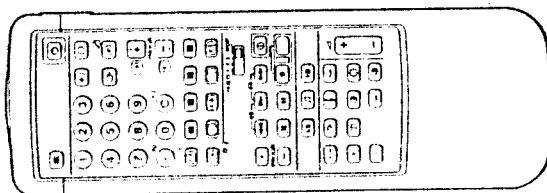
To Adjust:	Press	Then:	Result: (+ -- -)
Picture:			
Colour intensity	<b>C</b>	<b>+</b>	More -- Less
Contrast	<b>C</b>	<b>-</b>	More -- Less
Brightness	<b>B</b>	<b>+</b>	Bright -- Dark
Hue (for NTSC only)	<b>H</b>	<b>+</b>	Reddish -- Greenish
Sharpness	<b>S</b>	<b>+</b>	More -- Less
Sound:			
Bass	<b>B</b>	<b>+</b>	More -- Less
Treble	<b>T</b>	<b>+</b>	More -- Less
Balance	<b>B</b>	<b>-</b>	Left -- Right

To reset the picture and sound to factory set levels, press **→→→**.

On the set: Press the **→→→** and **+/-** buttons simultaneously.

## Use of the teletext service

Through the teletext service a great deal of information can be received at any time. Broadcasting stations make this service available through TV broadcasts. To use the teletext service, use the green keys on the "complete" side of the remote control unit. When the "simple" side of the remote control unit is used, only the basic functions are available.





### How to display teletext service

Operation	Result
<b>1</b> Select the channel you want to watch.	The channel changes on the screen.
<b>2</b> Press <b>0</b>	If there is no teletext signal, the indication "Page 100" appears on the screen.
<b>3</b> Use the number keys of the remote control unit to insert the three figures corresponding to the desired teletext page. <b>Note</b> In case of a mistake, press any three numbers, and then repeat the operation with the correct numbers.	The selected page number appears on the screen. After a few seconds, the selected page appears on the screen.
To return to normal TV programmes: Press <b>0</b> .	
To change teletext channel: First press <b>0</b> to return to the TV mode, and then repeat steps 1 to 3.	

Note: A weak TV signal may cause trouble in the use of teletext.

### Use of special teletext functions

Required function	Operation	Result (on the screen)
Page index required.	Press <b>0</b> (INDEX).	Page index appears. 
Sub-pages required (page 888).	Press <b>0</b> .	The sub-page appears (page 888).
Access to previous or following pages.	Press <b>0</b> (PAGE +) or <b>0</b> (PAGE -).	The preceding or the following page appears. 

## Use of the teletext service

Required function	Operation	Result (on the screen)
Superimposition of the teletext on the TV programme.	In the TV mode, press <b>Ⓢ</b> twice. To return to the normal teletext function press <b>Ⓢ</b> again.	Teletext information will appear superimposed on the TV programme.
To prevent page changes due to page updating.	Press <b>Ⓢ</b> (STILL). Press <b>Ⓢ</b> (TXT/MIX) to return to the normal function.	The <b>Ⓢ</b> (STILL) symbol appears on the screen.
Magnification of teletext characters.	Press <b>Ⓢ</b> once to magnify the upper half of the screen. Press twice to magnify the lower half of the screen. By pressing the button three times the normal vision is restored.	The upper or the lower half of the page is magnified.
Display of hidden information (answers to quizzes, etc.).	Press <b>Ⓢ</b> (RIV). Press again to hide the answers.	The information is displayed.
Watching a programme while the teletext searches for the required page.	1. Ask again for the page.	The number is displayed.
	2. Press <b>Ⓢ</b>	TV programme is displayed.
	3. When the required page has been found, the page number will be displayed.	F201
Display of a page at a preset time.	4. Press <b>Ⓢ</b> to display the page.	The desired page will be displayed.
	1. Request the page.	The selected page will be displayed.
	2. Press <b>Ⓢ</b> (MEM.T).	In the lower part of the screen the indication "T****" appears.
	3. Set the required time by using the number keys, and by inputting four figures (e.g. 0730 for "7:30").	The required time is displayed on the screen.
	To watch TV programmes until a preset time Press <b>Ⓢ</b> (CANC.). At the required time, the selected page appears in the upper part of the screen. Press <b>Ⓢ</b> to display the page.	
	To cancel the request Display the teletext page and then press <b>Ⓢ</b> (CANC.M.).	

Note: Depending on the teletext service, certain functions may not be available.

### Use of the FASTEXT function

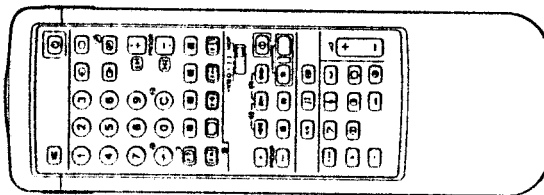
The FASTEXT function allows rapid access, at the touch of a single button, to the teletext functions. In the lower part of the screen, a colour coded index will be displayed when a FASTEXT teletext page is broadcasted. Each colour corresponds to the colored keys on the remote control unit.

#### Operation

Operation	Result
Press one of the coloured keys on the remote control unit corresponding to the coloured indications of the FASTEXT teletext page.	The selected teletext page appears on the screen.

#### Note

The correct use of the FASTEXT function depends on the signal being broadcast by the TV stations. Some TV stations may not broadcast FASTEXT teletext signal.



## Connections and optional functions

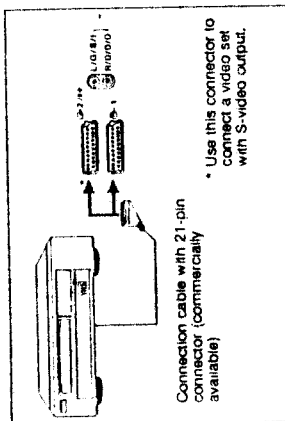
This TV set may be connected to other audio/video machines, such as videocameras, VTRs, videodisc players, or stereo systems.

### Connection to an external audio/video system

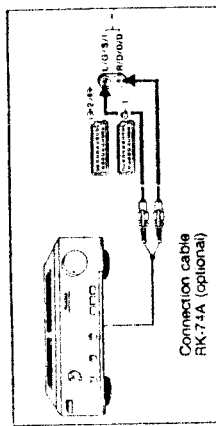
This TV set incorporates three groups of connectors, for input and output to the TV signal. Each group has the following characteristics.

Connector	Input signal	Output signal
③-1	Normal audio/video signal or RGB signal	TV tuner audio/video signal
③-2/③-3	Normal audio/video signal and S-video signal	Audio/video signal from a selectable source
③-④, ③-⑤, front panel	Normal audio/video signal and S-video signal	No signal

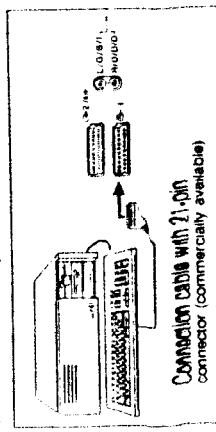
#### Connection of a TV set



#### Connection of an audio unit

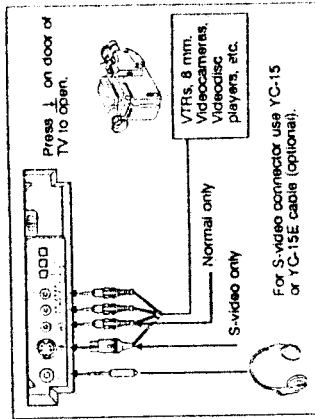


#### Connection to a computer with RGB output



#### Temporary connection of video apparatus

For a temporary connection (e.g. of a videocamera) use the front panel terminals.



#### Connection of a videotape recorder through the ③ connector

Connect the antenna input (AERIAL-IN) of the TV set to the antenna output (AERIAL-OUT) of the videotape recorder.

#### S-video input (Y/C input)

The video signal is formed by two separate signals: the luminance (Y) and the chrominance (C). Through the separation of the two signals it is possible to improve picture quality (luminance in particular), preventing reciprocal interference. This TV set features two S-video sockets able to directly receive this type of signal.

#### Pictures with distortion

Move the TV set away from the videotape recorder if pictures or sound become distorted.

## Connections and optional functions

### Video programme playback

Using the input selector, pictures coming from a videotape recorder connected to the TV set may be played back.

#### Operation

Operation	Result
Select the desired video input by pressing ③	The symbol of the selected input appears on the screen (see table below).
Press ① button to return to TV mode.	

#### Selectable inputs

Symbol	Selected input
③-1	Audio/video signal from ③-1 connector.
③-④	RGB signal from ③-1 connector.
③-2	Audio/video signal from ③-2/③-3 connector.
③-2	S-video signal (from a VTR with S-video output) from ③-2/③-3 connector.
③-3	Audio/video signal from ③-④ connector located on the front panel.
③-3	S-video signal from S-video ③ (4 pin) connector located on the front panel.
Input can be selected also with the P-①-② buttons of the TV set.	
In this case, first select ③, and then press the + / - buttons to select the desired input.	

### Selection of video output

The ③-2/③-3 connector may output 4 video signals. Select the outgoing video signal in the following way.

#### Operation

Operation	Result
Press ③ repeatedly to select the desired video output.	The selected video output symbol appears on the screen (see the table following).

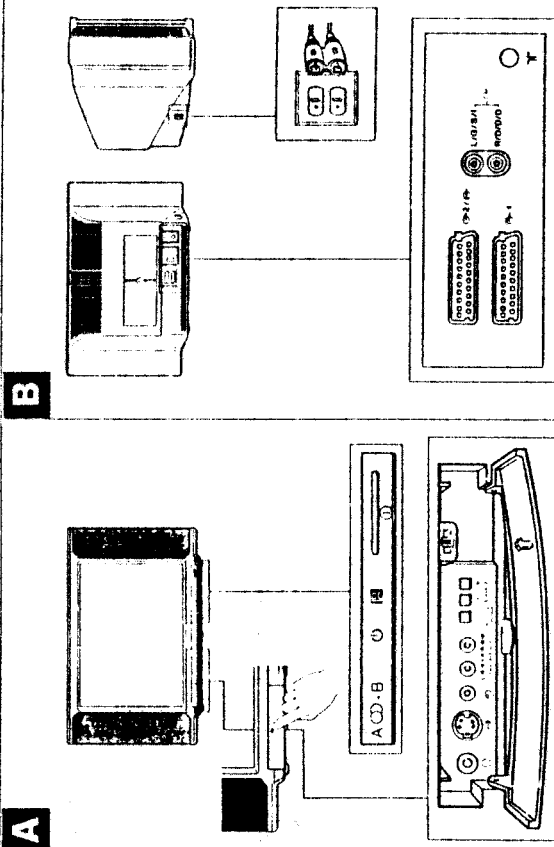
#### Output signal

Symbol	Selected output
1 ③	Audio/video signal from ③-1 connector.
2 ③	Audio/video signal from ③-2/③-3 connector.
3 ③	Audio/video signal from ③ and ④ connectors.
TV ③	Audio/video signal from T-type antenna connector T.



## General information

### Components identification



## General information

This section briefly describes controls of the TV set and the remote control unit, and their relevant functions.

A TV set front panel	
Indication	Description
	Power switch
	Standby switch
A, 00-8	Bilingual function indications
	Headphones connector (stereo mini-jack)
	Input connectors (S-video/video/audio)
	Function selector (programme/volume/input)
	Function adjustment keys
B TV set rear panel	
Indication	Description
	Speaker connectors (upper: left speaker, lower: right speaker)
	Connector 2, Euro AV (SCART, 21-pin), S-video in/video in/TV/video out signals
	Connector 1, Euro AV (SCART, 21-pin), RGB in/video in/TV/out signals
	Audio output connectors (RCA pin)
	Antenna connector (or IEC standard)
C Remote control unit — simplified side	
Indication	Description
	Input selector
	Teletext service key
	FASTEXT operation buttons
	TV set power switch and TV mode selector
	Standby key
1, 2, 3, 4, 5, 6, 7, 8, 9, 0	Number keys
	Channel selection key/2-figure programmes
	Volume adjustment key
	Programme selection key
D Remote control unit — complete side	
Indication	Description
	Sound muting key
	Standby key
1, 2, 3, 4, 5, 6, 7, 8, 9, 0	Number keys
	Input selector
	TV set power switch and TV mode selector
	Output selector
	Teletext key
	Music programme key
A/B	Bilingual programmes language selection
	Channel selection key/2-figure programmes
	Channel direct selection key
	Special sound effect key
	Time display
	Teletext operation keys
	FASTEXT operation buttons
	Display key
	Reset key
	Volume adjustment keys
	Programme selection keys
	Image and audio adjustment keys
VIDEO 1/2/3, MDP	Video unit selector
	Video units function key
	Programme canceling key
	Channel presetting key
	Channel tuning keys
	Channel storing keys
	Broadcasting stations identification key

This section briefly describes controls of the TV set and the remote control unit, and their relevant functions. For further details see the page shown on the right side of each description.

A TV set front panel	
Indication	Description
	Power switch
	Stand-by switch
A Q B	Bilingual function indications
	Headphones connector (stereo mini-jack)
	Input connectors (S-video/video/audio)
	Function selector (programme/volume/input)
	Function adjustment keys

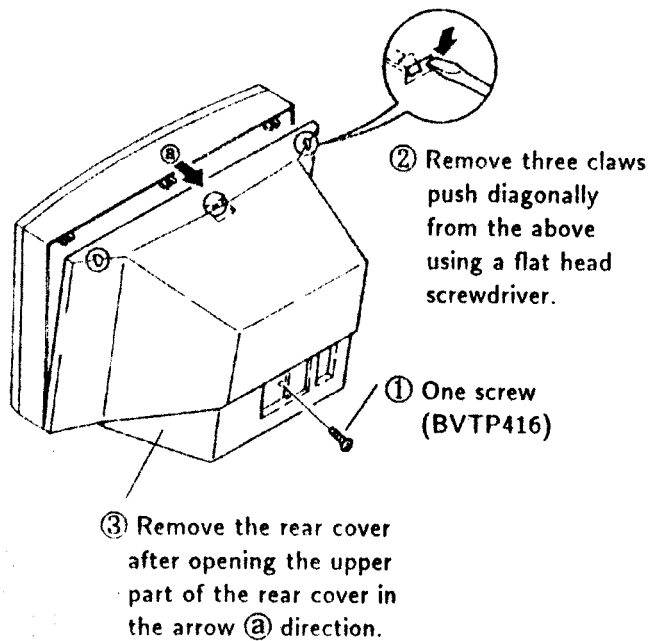
B TV set rear panel	
Indication	Description
	Speaker connectors (upper: left speaker; lower: right speaker)
	Connector 2, Euro AV (SCART, 21-pin), S-video in/video in/TV/video out signals.
	Connector 1, Euro AV (SCART, 21-pin), RGB in/video in/TV/out signals.
	Audio output connectors (RCA pin)
	Antenna connector (cf IEC standard)

C Remote control unit — simplified side	
Indication	Description
	Input selector
	Teletext service key
	TV set power switch and TV mode selector
	Standby key
1 2 3 4 5 6 7 8 9 0	Number keys
	Channel selection key/ 2-figure programmes
	Volume adjustment key
	Programme selection key

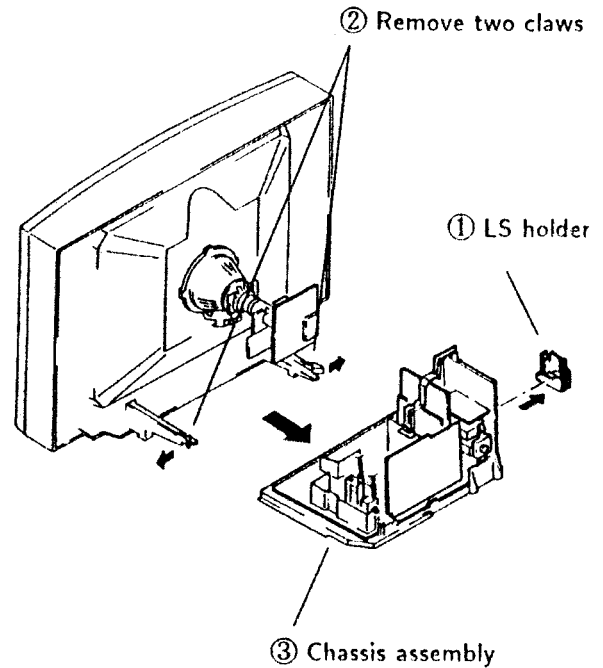
D Remote control unit — complete side	
Indication	Description
	Sound muting key
	Standby key
1 2 3 4 5 6 7 8 9 0	Number keys
	Input selector
	TV set power switch and TV mode selector
	Output selector
	Teletext key
	Music programme key
A/B	Bilingual programmes language selection
	Channel selection key/ 2-figure programmes
	Channel direct selection key
	Special sound effect key
	Time display
	Teletext operation keys
	Display key
	Reset key
	Volume adjustment keys
	Programme selection keys
	Image and audio adjustment keys
MEM	MEM light indication
USE/MEM	Normal/programme mode selector
VIDEO 1/2/3, MDP	Video unit selector
	Video units function key
	Programme cancelling key
	Channel presetting key
	Channel tuning keys
	Channel storing keys
	Broadcasting stations identification key
RESET	Cancel key

## SECTION 2 DISASSEMBLY

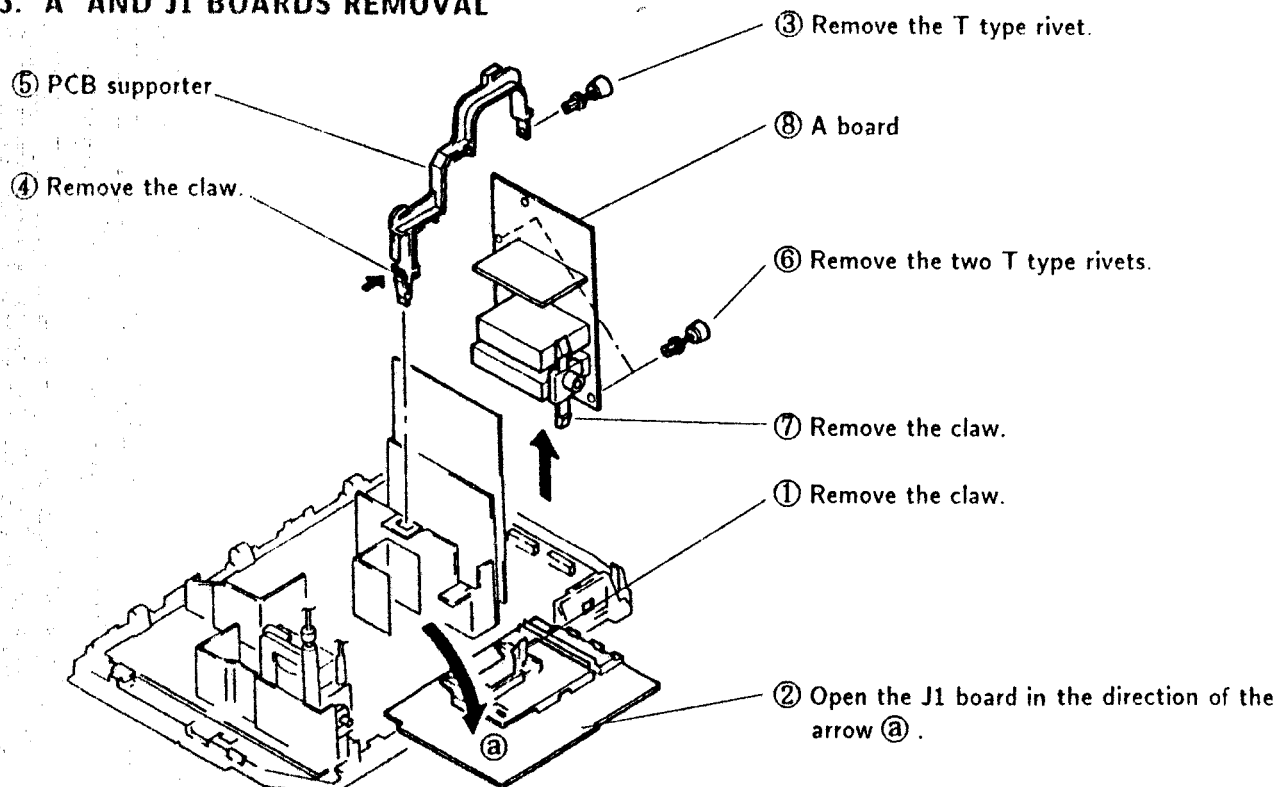
### 2-1. REAR COVER REMOVAL



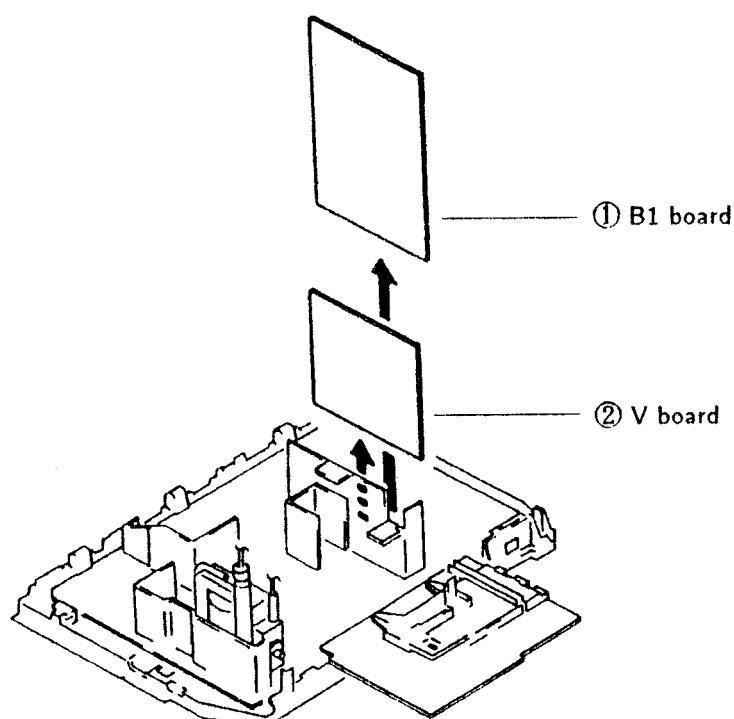
### 2-2. CHASSIS ASSEMBLY REMOVAL



### 2-3. A AND J1 BOARDS REMOVAL



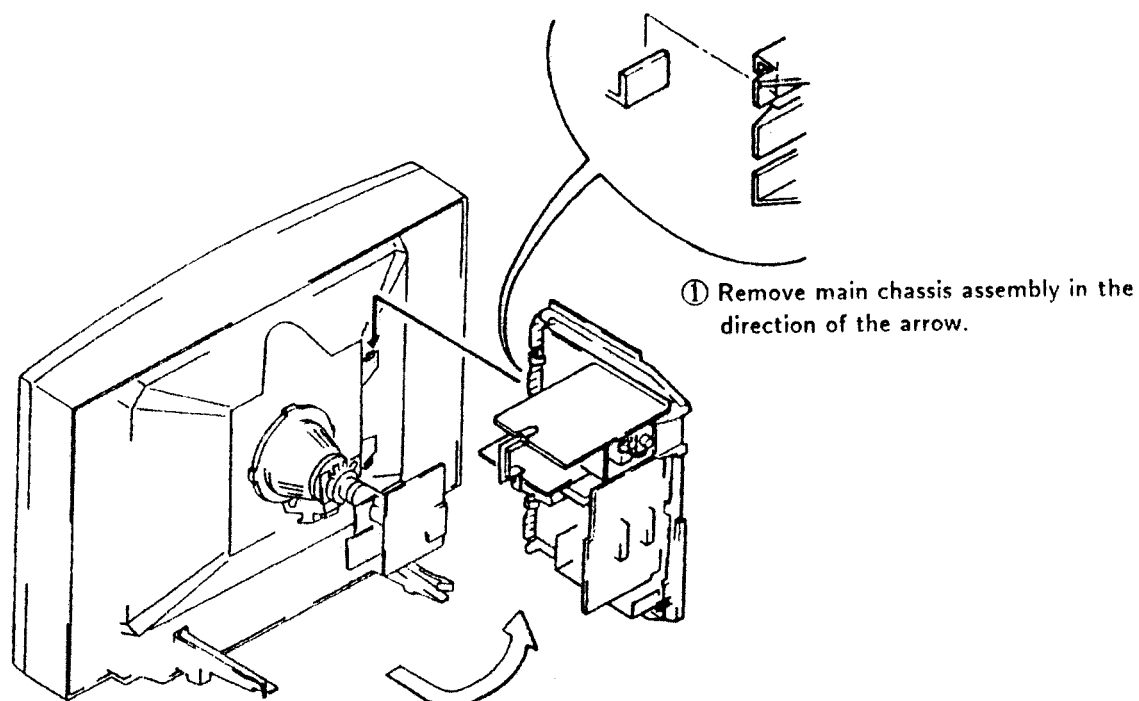
## 2-4. B1 AND V BOARDS REMOVAL



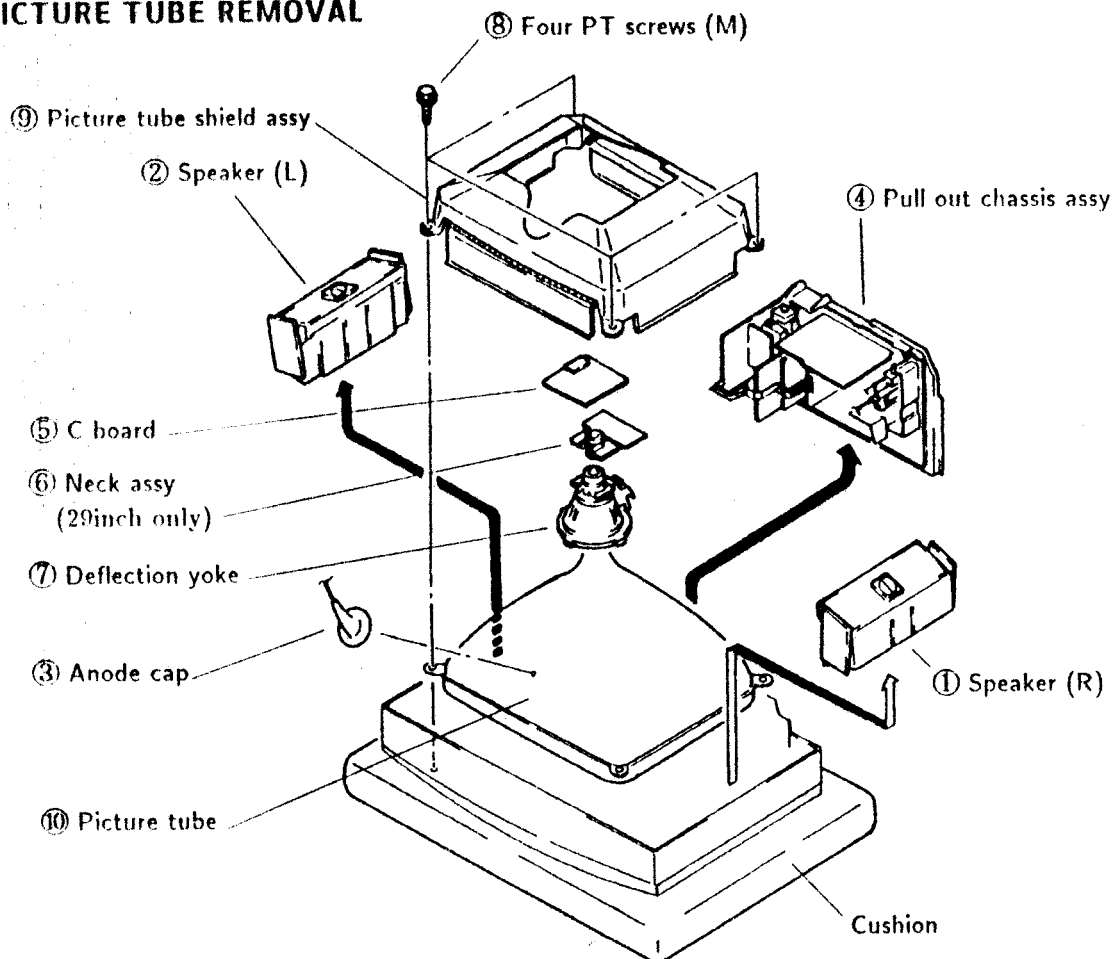
Note : 10 pin extension cable (S-0945-001-0)

## 2-5. SERVICE POSITION

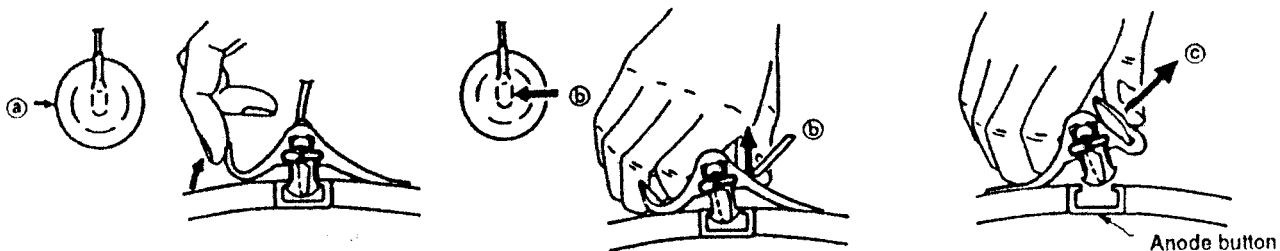
- \* Remove the connector bracket from the main chassis assembly and then perform the following servicing.  
(Refer to 2-2. CHASSIS ASSEMBLY REMOVAL.)



## 2-6. PICTURE TUBE REMOVAL



### • REMOVAL OF ANODE-CAP • REMOVING PROCEDURES

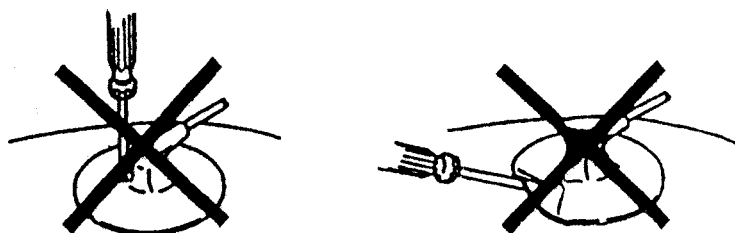


- ① Turn up one side of the rubber cap in the direction indicated by the arrow ①.
- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②.

- ③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ③.

### • HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anode-caps!  
A material fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly!  
The shatter-hook terminal will stick out or hurt the rubber.



## SECITON 3 SET-UP ADJUSTMENTS

- When complete readjustment is necessary or a new picture tube is installed, carry out the following adjustments.
- Unless there is specific instruction to the contrary, carry out these adjustments with the rated power supply.
- Unless there is specific instruction to the contrary, set the controls and switches this way :
  - ⓘ Contrast .....80%  
(or remote control normal)
  - ☼ Brightness .....50%

- Carry out the following adjustments in this order:
  1. Beam landing
  2. Convergence
  3. Focus
  4. White balance

**Note :** Testing equipment required

1. Color bar/pattern generator
2. Degausser
3. DC power supply
4. Digital multimeter
5. Oscilloscope

### Preparations :

- In order to reduce the influence of geomagnetism on the set's picture tube face it east or west.
- Switch on the set's power and degauss with the degausser.

### 3-1. BEAM LANDING

1. Input the white signal with the pattern generator.  
 Contrast      |  
 Brightness    |    normal
2. Position neck ass'y as shown in Fig 3-2.
3. Set the pattern generator raster signal to red.
4. Move the deflection yoke to the rear and adjust with the purity control so that the red is at the center and the blue and the green take up equally sized areas on each side.  
(See Figures 3-1 through 3-3.)
5. Move the deflection yoke forward and adjust so that entire screen is red. (See Figure 3-1.)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it.  
(See Figure 3-4.)

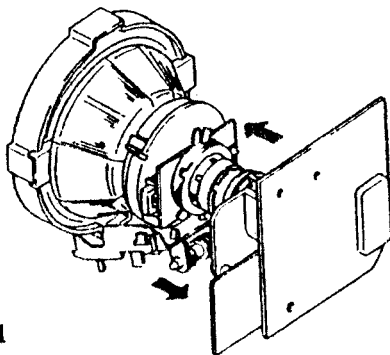


Fig. 3-1

Fig. 3-2

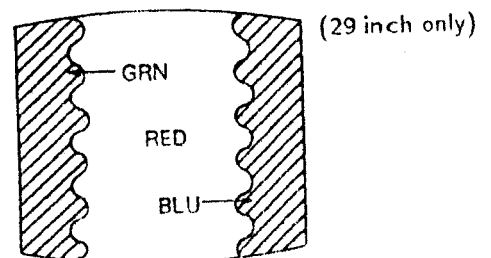
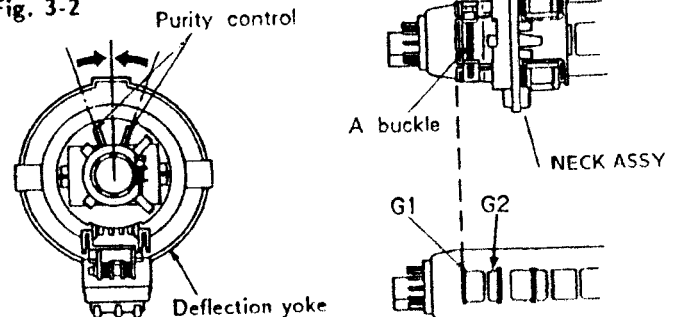


Fig. 3-3

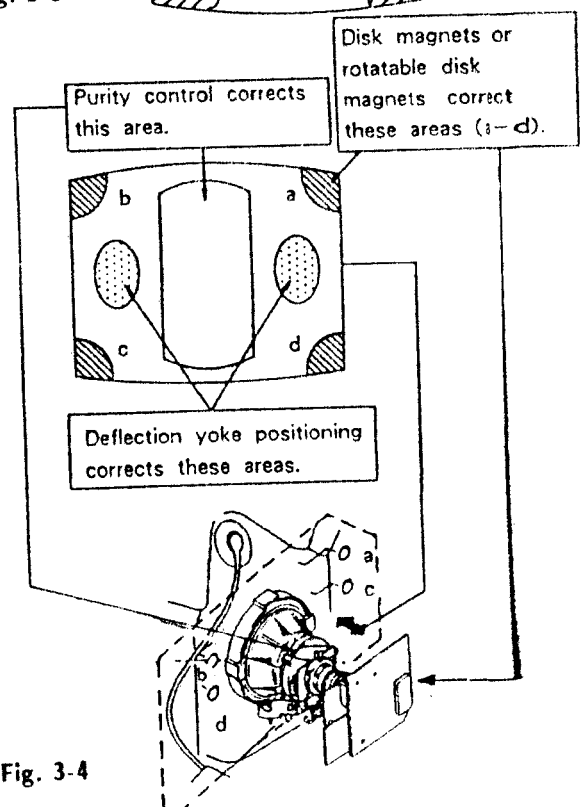


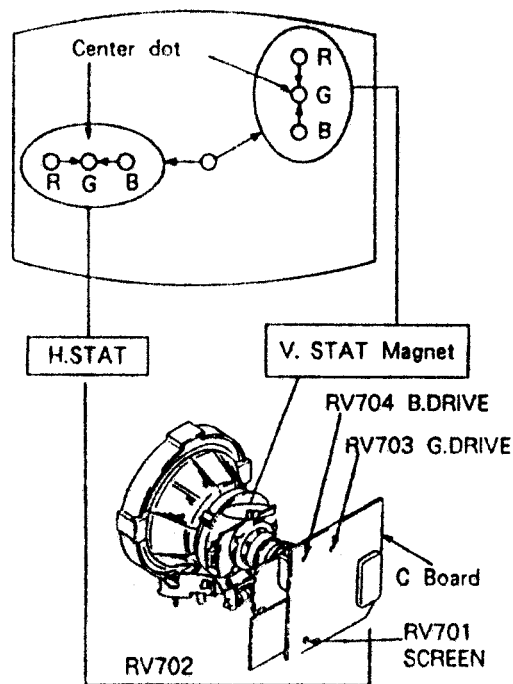
Fig. 3-4

### 3-2. CONVERGENCE

#### Preparations :

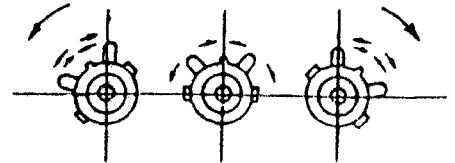
- Before starting this adjustment, adjust the focus, horizontal size, and vertical size.
- Minimize the brightness setting.
- Provide dot pattern.

#### (1) Horizontal and vertical static convergence

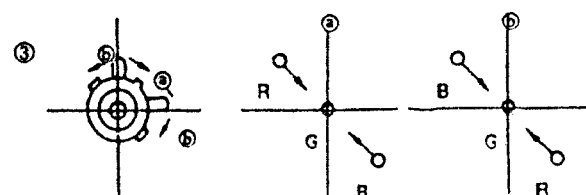
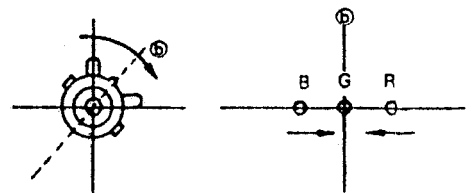
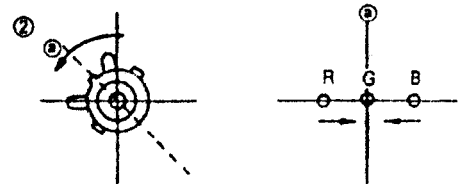
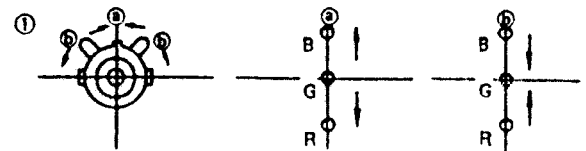


1. (Moving horizontally), adjust the H.STAT control so that the red, green, and blue points are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green, and blue points are on top of each other at the center of the screen.
3. If the H.STAT variable resistor cannot bring the red, green, and blue points together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V. STAT magnet in the manner given below. (In this case, the H.STAT variable resistor and the V.STAT magnet influence each other)

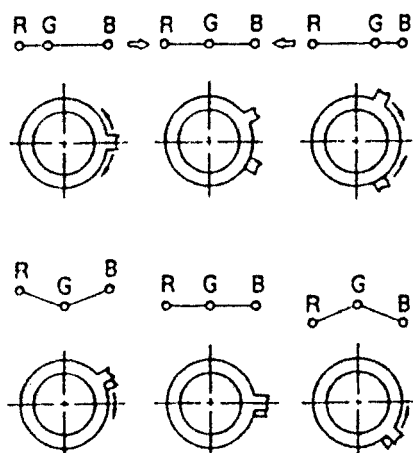
- Tilt the V.STAT magnet and adjust the static convergence by opening or closing the V.STAT magnet.



4. If the V.STAT magnet is moved in the direction of the Ⓐ and Ⓑ arrows, the red, green, and blue points move as shown below.

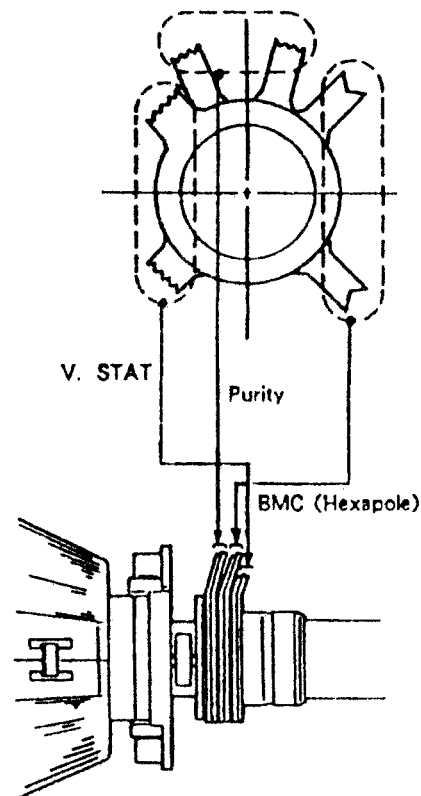


# • Operation of BMC (Hexapole) Magnet



- The respective dot positions resulting from moving each magnet interact, so be sure to perform adjustment while tracking.

Use the H.STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).



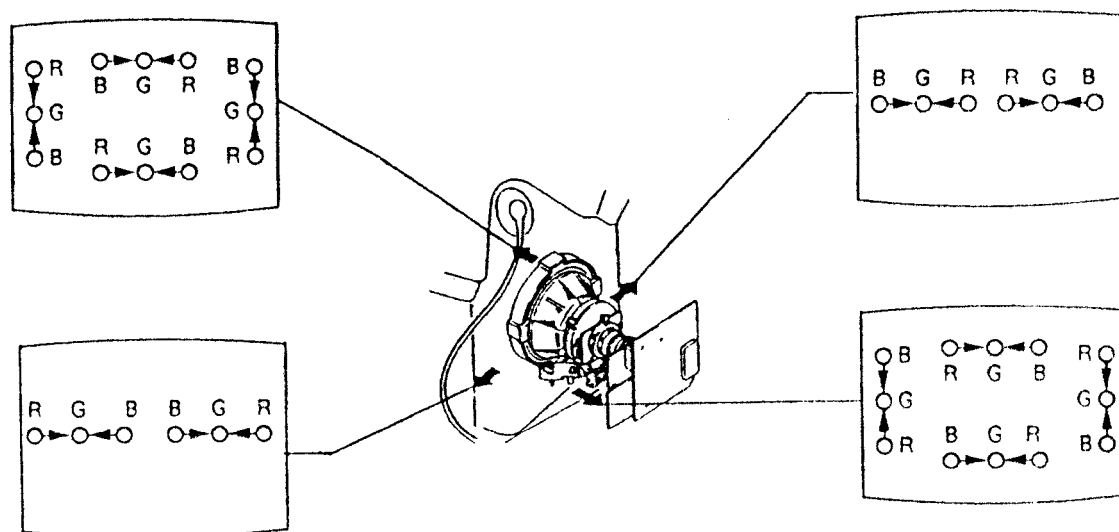
## (2) Dynamic convergence adjustment

### Preparations :

Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence.

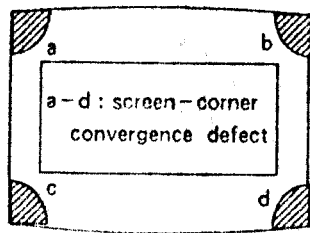
1. Slightly loosen the deflection yoke screws.
2. Remove the deflection yoke spacer.

3. Move the deflection yoke as shown in the figure below and optimize the convergence.
4. Tighten the deflection yoke screws.
5. Install the deflection yoke spacer.

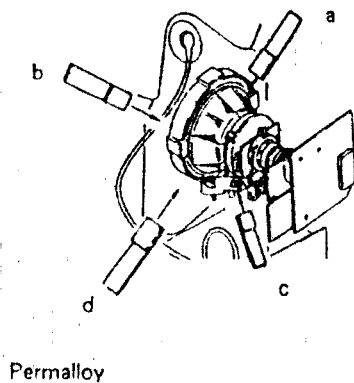




### (3) Screen corner convergence

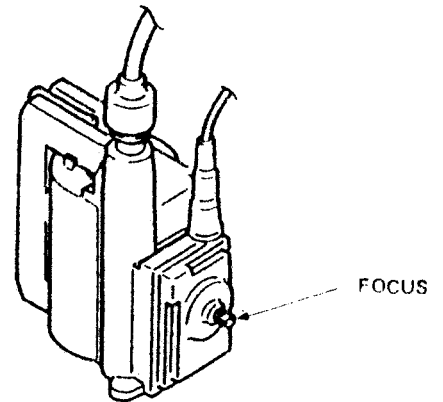


Install the permalloy assembly for the section with faulty.



### 3-3. FOCUS

Adjust the focus to optimize the screen.



### 3-4. WHITE BALANCE

#### [ Screen G2 setting ]

1. Input the dot signal from the pattern generator.
2. Set the picture brightness control to its lowest level.
3. Apply 170V DC to the R, G, and B cathodes with an external power supply.
4. While watching the picture, adjust G2 control RV701 (Screen) to the point just before the return lines disappear.

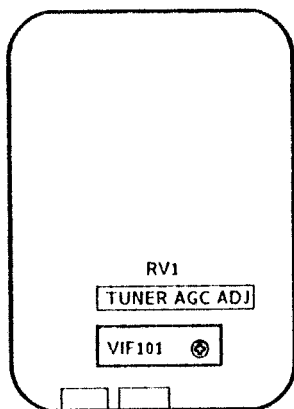
#### [ White balance adjustment ]

1. Input an all-white signal from the pattern generator.
2. Set the picture brightness and color controls to their normal levels.
3. Use the RV704 (B Drive) and RV703 (G Drive) to adjust white balance.

In the adjustments below, have the picture color and brightness settings at their normal levels unless there is a specific instruction to the contrary.

## SECTION 4 CIRCUIT ADJUSTMENTS

### 4-1. A BOARD ADJUSTMENTS

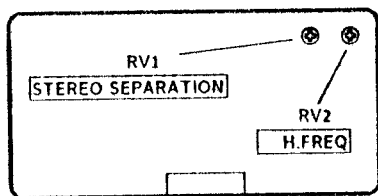


A BOARD (COMPONENT SIDE)

#### TUNER AGC ADJUSTMENT (VIF101, RV1)

1. Align with an appropriate signal between stations.
2. Adjust RV1 so that snow noise and cross modulation just disappear from the picture.

### IFG5.5S SIF



IFG5.5S SIF -component side-

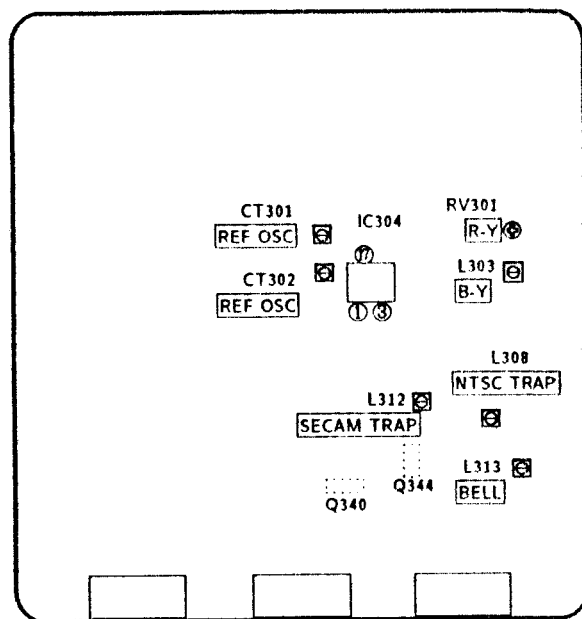
#### STEREO SEPARATION ADJUSTMENT (RV1)

1. Input stereo signals. (L-CH 400Hz, R-CH 1KHz)
2. Check the stereo indicator.
3. Connect an oscilloscope to pin ⑧ (CH1) of CN1 through a band pass filter of 1KHz
4. Adjust RV1 so that 1KHz voltage goes down to the minimum.

#### H FREQ (RV2)

1. Input a PAL COLOR BAR signal, then connect a jumper between pin ⑫ IC4 and GND.
2. Connect a frequency counter to pin ④ IFG5.5S (H.F) of CN1 through a probe of 10 : 1.
3. Adjust RV2 (H.FREQ)  $15.625 \pm 50\text{Hz}$ .
4. After adjustment, remove the jumper.

### 4-2. B1 BOARD ADJUSTMENTS



B1 BOARD (COMPONENT SIDE)

#### REFERENCE OSCILLATOR ADJUSTMENT (CT302 8.8MHz)

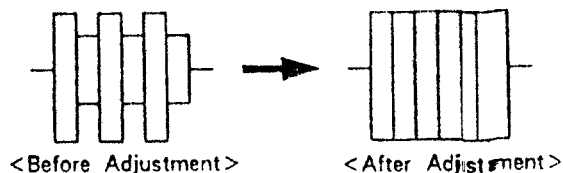
1. Input a PAL color bar signal.
2. Ground pin ⑦ of the IC304.
3. Adjust CT302 to obtain synchronization.

#### REFERENCE OSCILLATOR ADJUSTMENT (CT301 7.16MHz)

1. Input an NTSC color bar signal.
2. Ground pin ⑦ of IC304.
3. Adjust the CT301 to obtain synchronization.
4. Remove the jumper grounding pin ⑦ of IC304.

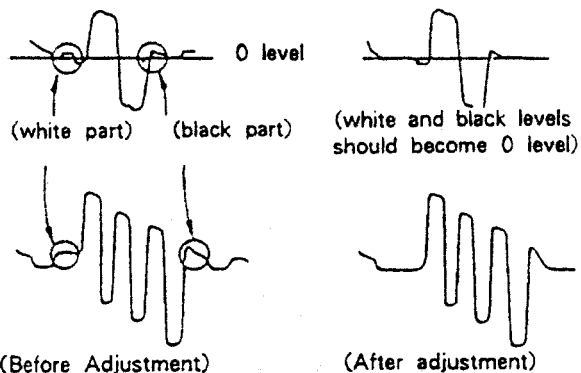
#### BELL FILTER ADJUSTMENT (L313)

1. Input a SECAM color bar signal.
2. Connect the oscilloscope to the emitter of Q344.
3. Adjust L313 so that the waveform is flat.

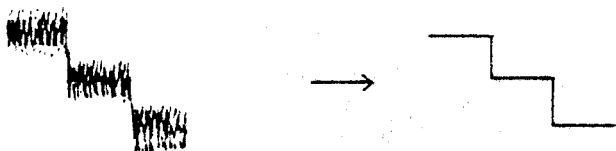


**DISCRIMINATION ADJUSTMENTS  
(RV301 and L303)**

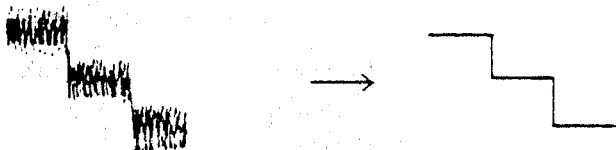
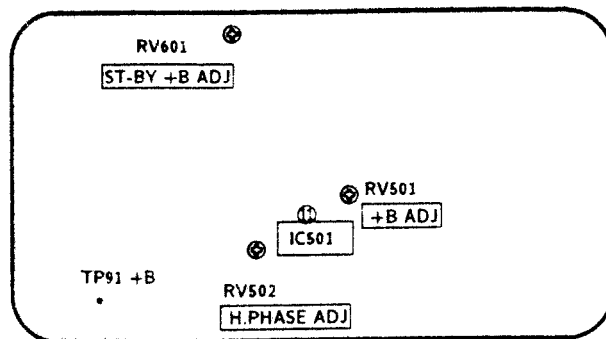
1. Input a SECAM color bar signal.
2. Connect the oscilloscope to pin ① of IC304.
3. Adjust RV301 until the white and black sections of the waveform at pin ① are at the 0 level.  
Connect the oscilloscope to pin ③ of IC304.
4. Adjust L303 until the white and black sections of the waveform at pin ③ are at the 0 level.
5. the waveform at pin ③ are at the 0 level.

**SECAM TRAP (L312)**

1. Input a SECAM color bar signal.
2. Connect oscilloscope to Q340 emitter and adjust L312 to minimize color carrier on the Y-signal.

**NTSC TRAP (L308)**

1. Input a NTSC (3.58) color bar signal.
2. Connect oscilloscope to Q340 emitter and adjust L308 to minimize color carrier on the Y-signal.

**4-3. D BOARD ADJUSTMENTS****D BOARD (COMPONENT SIDE)****+B ADJUSTMENT (RV501)**

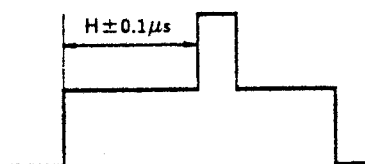
1. Connect the digital multimeter to TP91.
2. Adjust RV501 to obtain  $135 \pm 0.2V$ .

**ST-BY +B ADJUSTMENT (RV601)**

1. Put the system into  $\text{⏻}$  standby mode (remote commander).
2. Connect the digital multimeter to TP91.
3. Adjust RV601 to obtain  $135 \pm 3V$ .
4. Take the system out of  $\text{⏻}$  standby mode (remote commander).

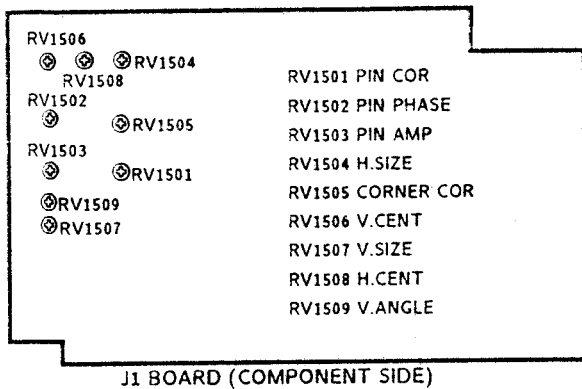
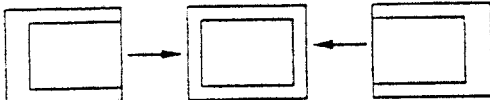
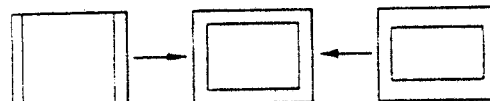
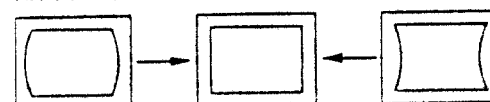
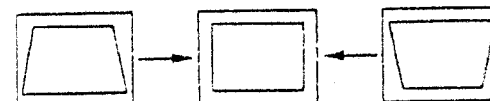
**H.PHASE ADJUSTMENT (RV502)**

1. Input a PAL color bar signal.
2. Set the picture and brightness controls to their normal levels.
3. Set RV1508 (H.CENT) to its mechanical center.
4. Connect the oscilloscope to pin ⑪ (SCP) of IC 501.
5. Rotate RV502 to adjust to  $H \pm 0.1\mu s$ .

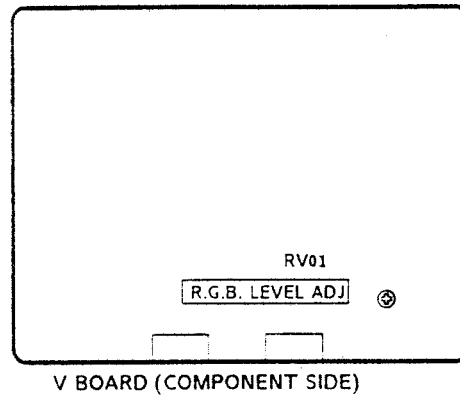
**Standard of H. PHASE**

Model Size	H
25 "	$5.1\mu s$
29 "	$5.5\mu s$

## 4-4. J1 BOARD ADJUSTMENTS

RV1508  
H. CENT (HORIZONTAL CENTER)RV1504  
H. SIZE (HORIZONTAL SIZE)RV1506  
V. CENT (VERTICAL CENTER)RV1507  
V. SIZE (VERTICAL SIZE)RV1509  
V. ANGLE (VERTICAL ANGLE)RV1503  
PIN AMP (PINCUSHION AMPLIFIER)RV1502  
PIN PHASE (PINCUSHION PHASE)RV1501  
PIN. COR (PINCUSHION CORRECT)RV1505  
CORNER COR (CORNER CORRECT)

## 4-5. V BOARD ADJUSTMENT

**RGB LEVEL ADJUSTMENT (RV01)**

1. Maximize the picture setting.
2. Adjust RV01 so that the RGB output is 0.75V.

## 4-6. SECONDARY ADJUSTMENTS

### SUB BRIGHTNESS ADJUSTMENT

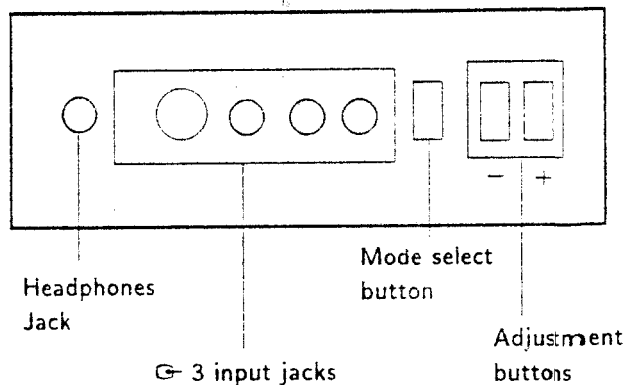
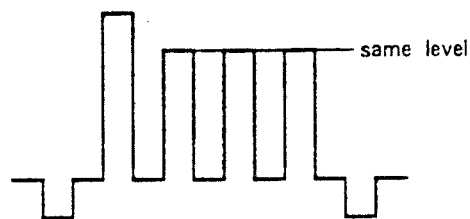
1. Set the system to receive a test pattern.
2. Press  $\rightarrow \cdot \leftarrow$  on the remote commander to put the system into normal mode.
3. Switch off the power.
4. While depressing the adjusting buttons + and - simultaneously, turn on the power. (SUB mode is obtained)
5. Minimize the  $\bullet$  contrast setting.
6. Adjust the  $\odot$  brightness control so that the gray scale 0 IRE section is cut off completely and the 20 IRE section is barely glowing.
7. Depress the  $\diamond$  (store) button of the remote commander. (SUB mode is released)

If there is no test color pattern

1. Set the system to receive a color pattern.
2. Press  $\rightarrow \cdot \leftarrow$  on the remote commander to put the system into normal mode.  
Set the  $\odot$  color to its normal state.
- 3-5. Steps are the same as above.
6. Since 20 IRE is nearly blue, adjust the  $\odot$  brightness control so that the blue barely glows.
7. Same as step 7 above.
8. Press  $\rightarrow \cdot \leftarrow$  on the remote commander to put the system into normal mode.

### SUB COLOR ADJUSTMENT

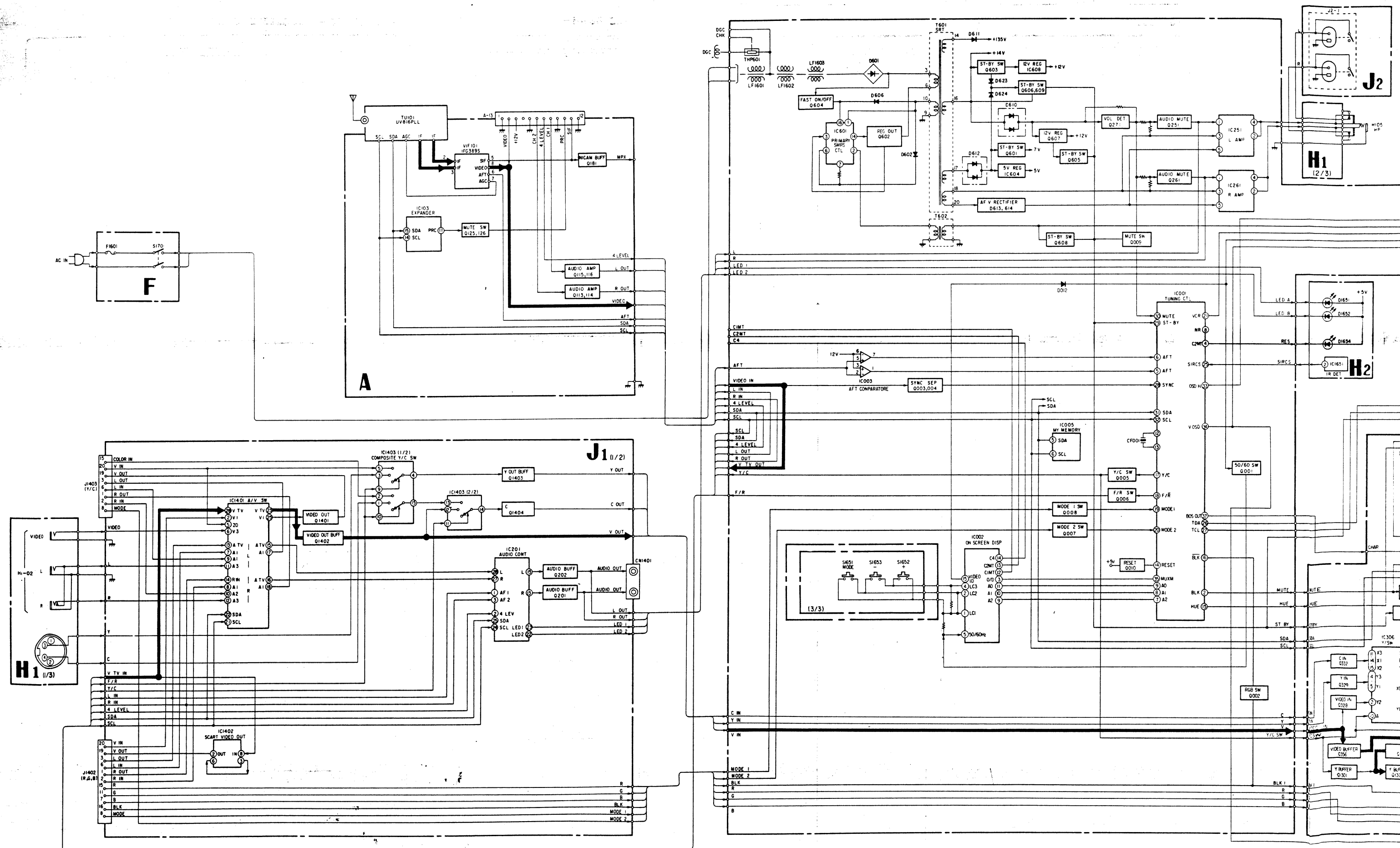
1. Set the system to receive color bars.
2. Press  $\rightarrow \cdot \leftarrow$  on the remote commander to put the system into normal mode.
3. Cut off the power.
4. While depressing the adjustment buttons + and - simultaneously, turn on the power. (SUB mode is obtained).
5. Adjust the color control so that the B out waveform (pin ⑤ of C board connector CNC72) is as shown in the figure below.
6. Depress the  $\diamond$  (store) button of the remote commander. (SUB mode is released)

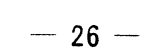


# SECTION 5 DIAGRAMS

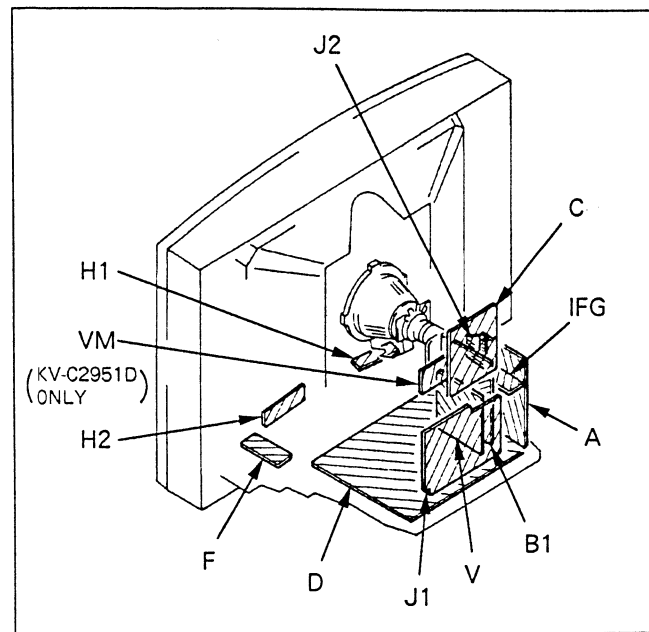
KV-C2551D/C2951D  
RM-816

KV-C2551D/C2951D  
RM-816






## 5-2. CIRCUIT BOARDS LOCATION



## Reference information

RESISTOR	: RN	METAL FILM
	: RC	SOLID
	: FPRD	NONFLAMMABLE CARBON
	: FUSE	NONFLAMMABLE FUSIBLE
	: RS	NONFLAMMABLE METAL OXIDE
	: RB	NONFLAMMABLE CEMENT
	: RW	NONFLAMMABLE WIREWOUND
	: *	ADJUSTMENT RESISTOR
COIL	: LF-8L	MICRO INDUCTOR
CAPACITOR	: TA	TANTALUM
	: PS	STYROL
	: PP	POLYPROPYLENE
	: PT	MYLAR
	: MPS	METALIZED POLYESTER
	: MPP	METALIZED POLYPROPYLENE
	: ALB	BIPOLAR
	: ALT	HIGH TEMPERATURE
	: ALR	HIGH RIPPLE






## 5-3. SCHEMATIC DIAGRAM AND PRINTED WIRING BOARDS

Note: The components identified by shading and mark  are critical for safety. Replace only with part number specified.

## Note :

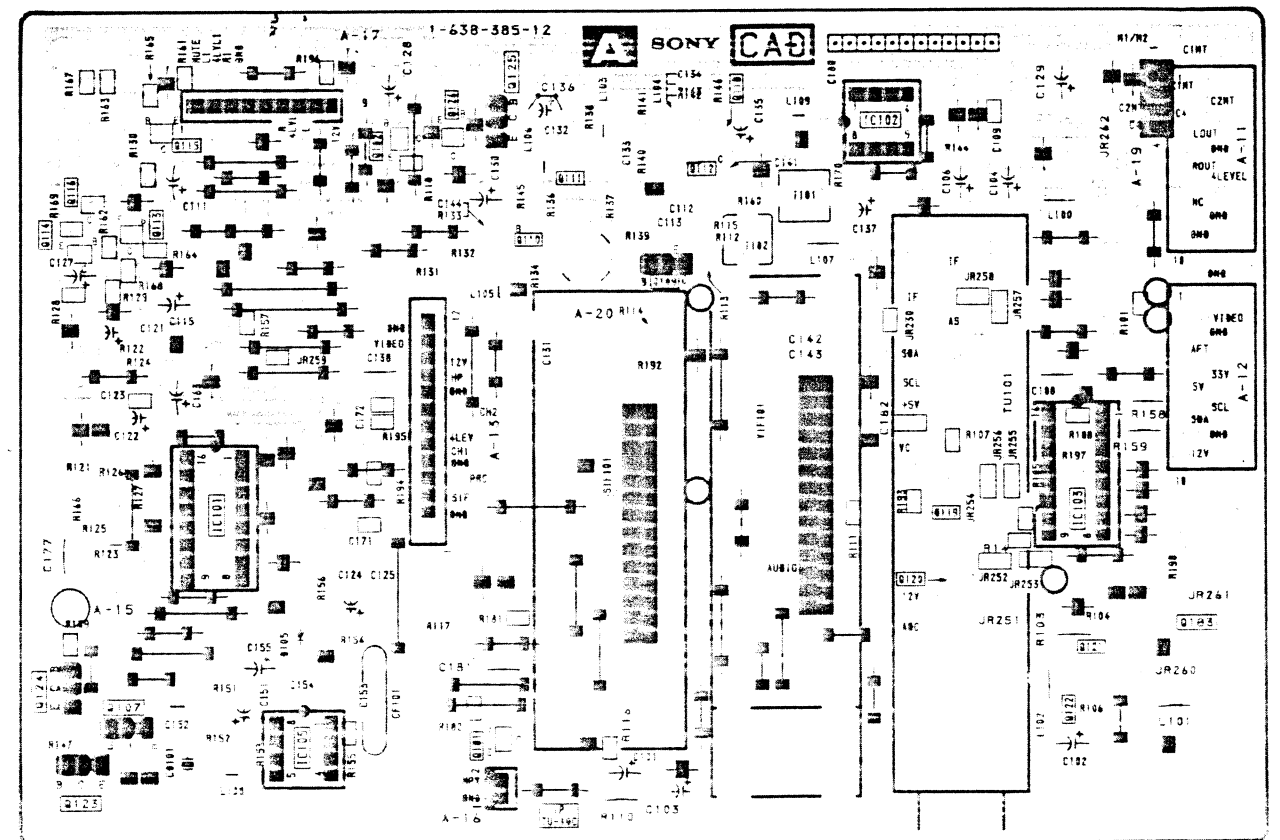
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  
 $\mu\text{F}$ :  $\mu\mu\text{F}$  50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5mm  
Rating electrical power: 1/4W

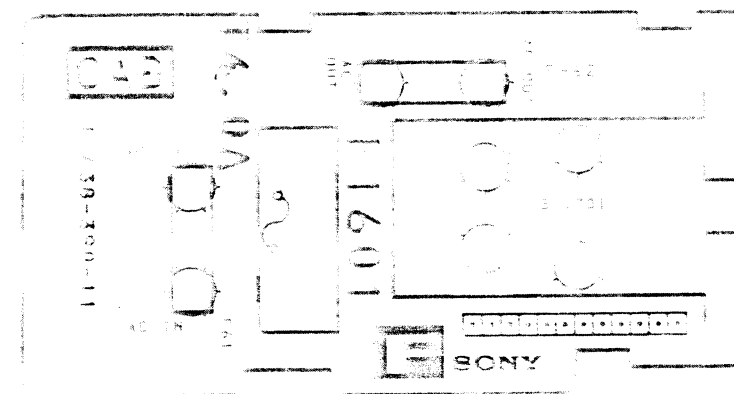
- Chip resistor is in 1/10W.
- All resistors are in ohms:  $\text{k}\Omega = 1000\Omega$ ,  $\text{M}\Omega = 1000\text{k}\Omega$
-  : nonflammable resistor.
-  : fusible resistor.
- $\Delta$  : internal component.
-  : panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in V.
- Readings are taken with a 10M $\Omega$  digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
-  : B+ line.
-  : signal path. (RF)

**A** [TUNER, SIF, VIF] **F** [AC IN, POWER SW.] **J1** [AUDIO CONTROL, AV INPUT, Y/C INPUT, SCART VIDEO OUT, EAST-WEST CORRECTION] **J2** [SPEAKER TERMINAL]

## -A Board-



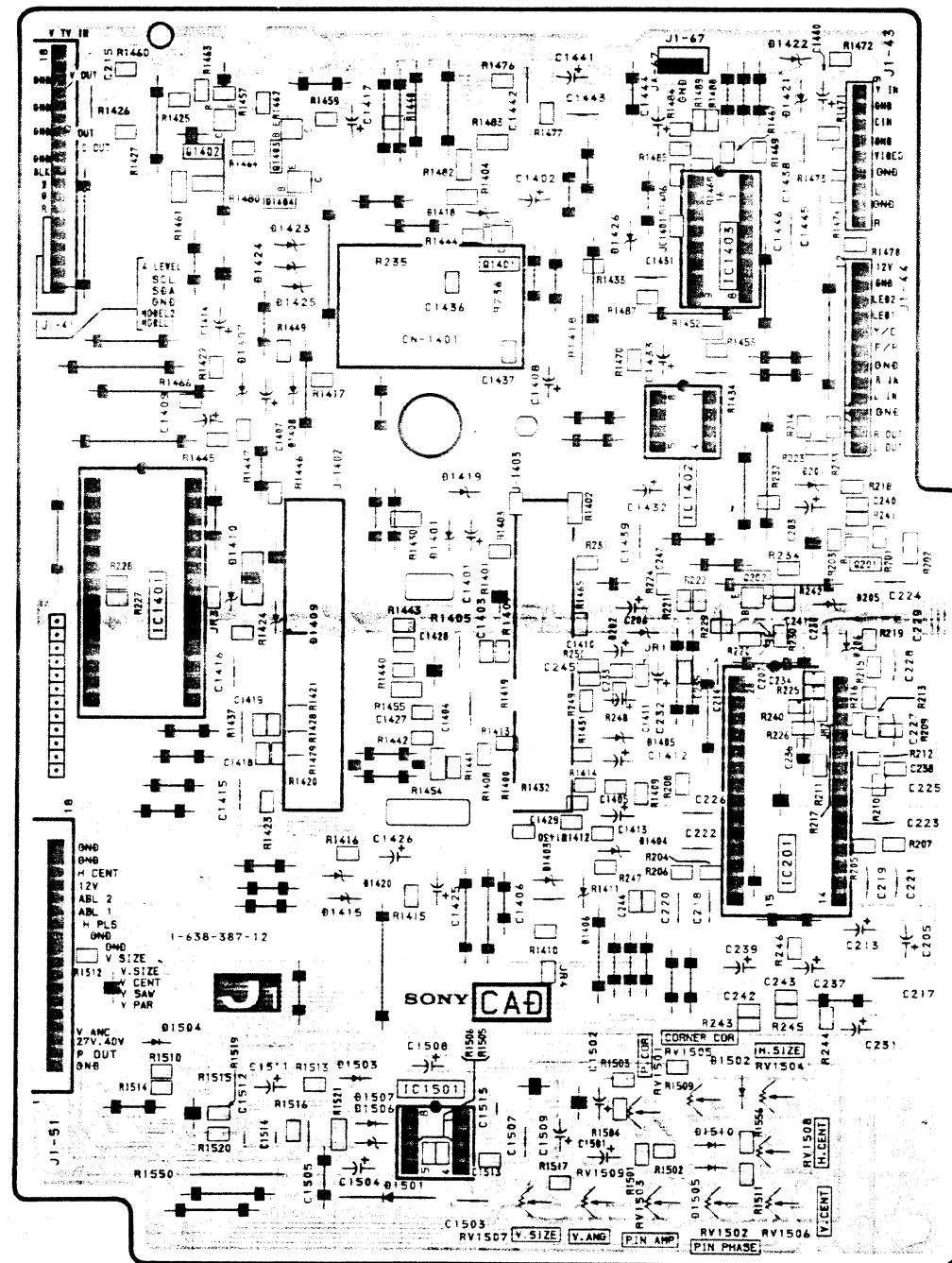
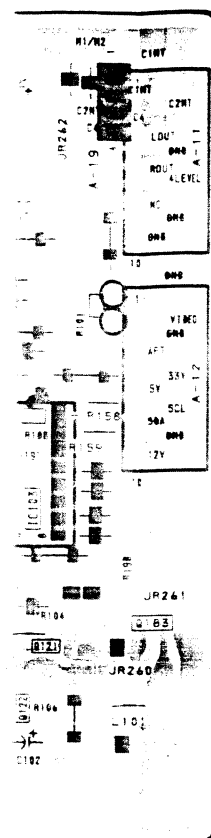
## -F Board-



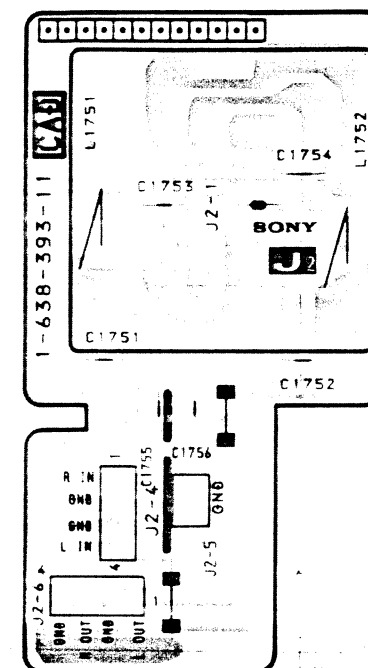


T. OUT, **J2** [SPEAKER TERMINAL] **VM** [VM AMP] **H1** [CONTROL SW, AV INPUT, HEADPHONE] **H2** [SIRCS RECEIVER, INDICATOR]

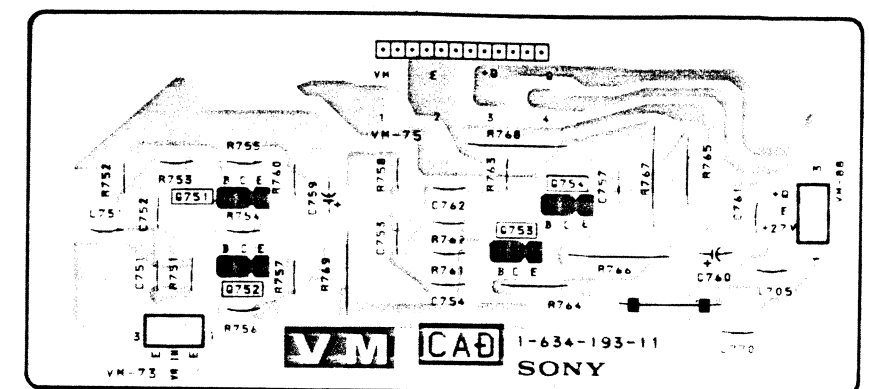
-J1 Board-



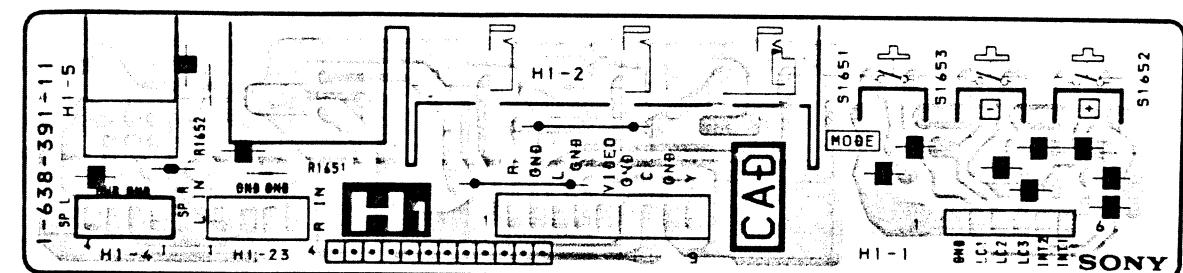
-J2 Board-



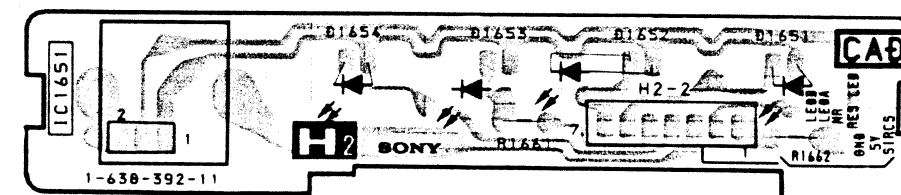
-VM BOARD- (KV-C2951D ONLY)



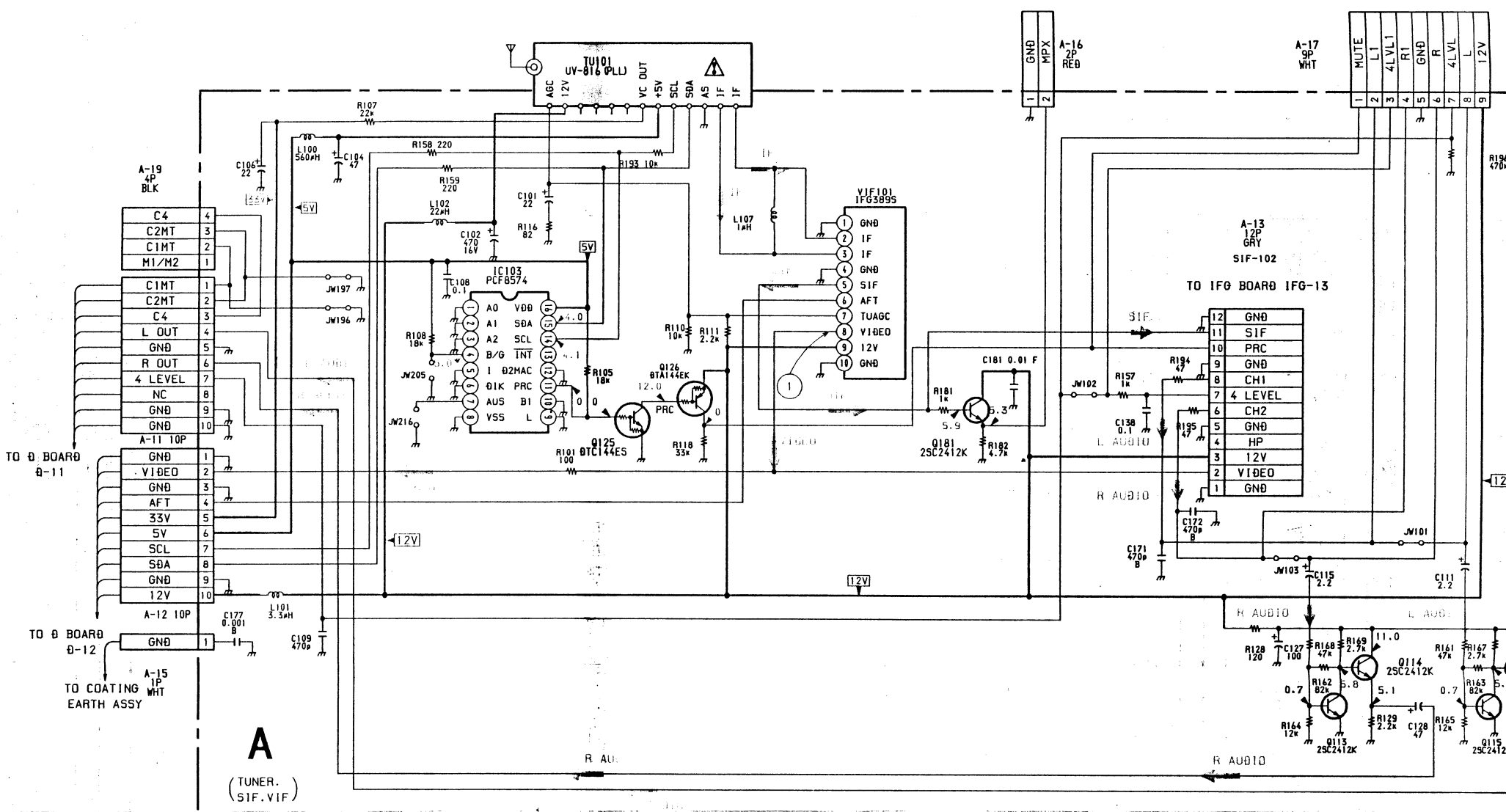
-H1 Board-



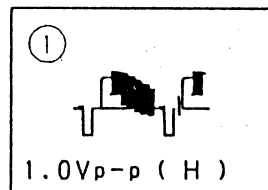
-H2 Board-



A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O

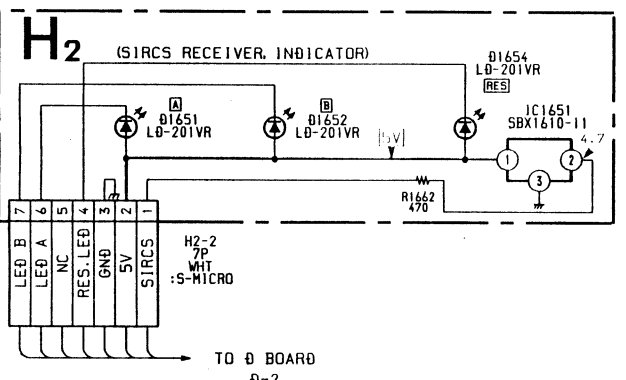
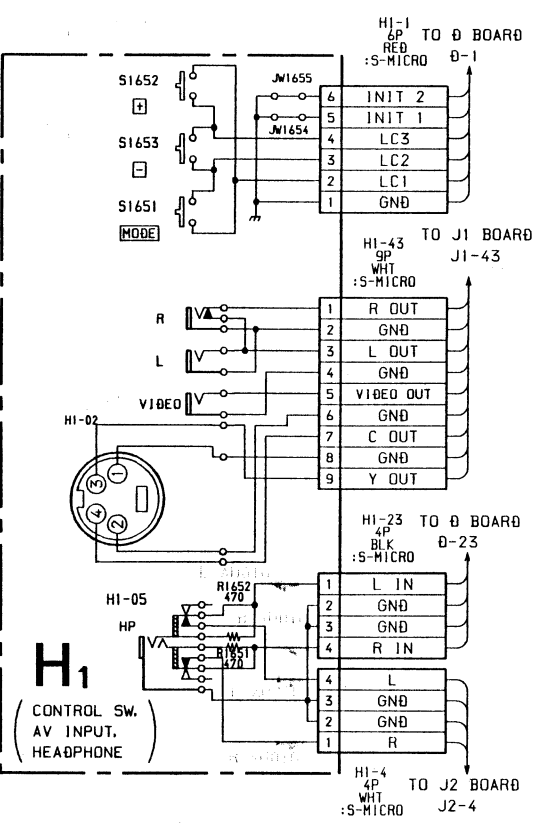


• WAVEFORMS A BOARD



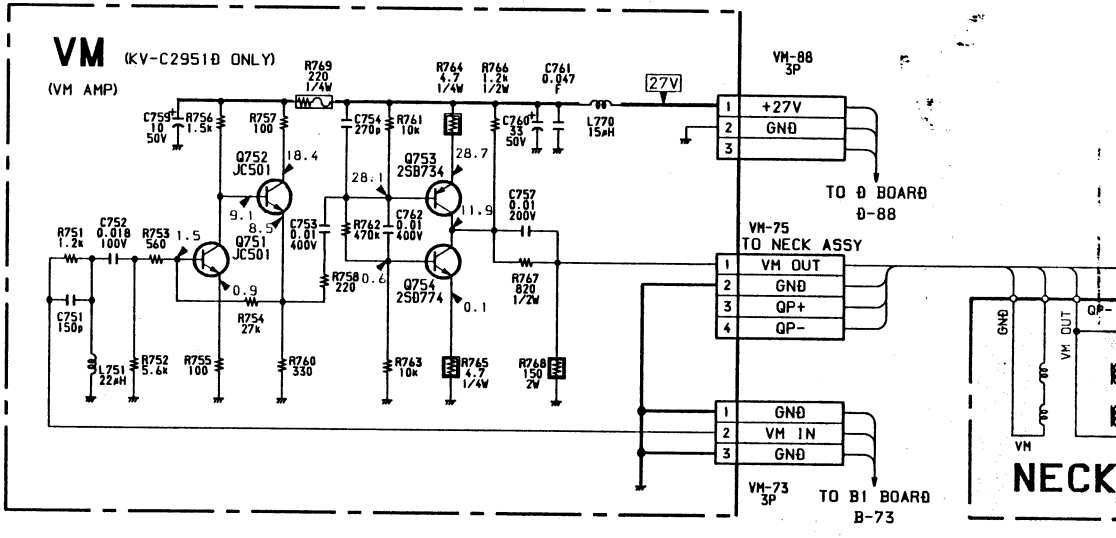
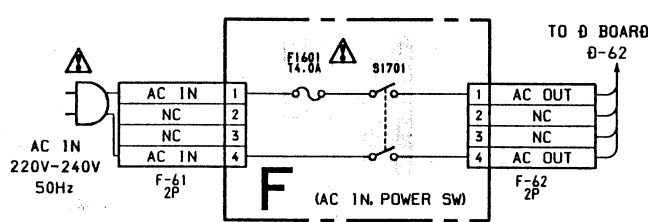
• A BOARD

IC103	PCF8574	EXPAN
Q113	25C2412K	AUD10
Q114	25C2412K	AUD10
Q115	25C2412K	AUD10
Q116	25C2412K	AUD10
Q125	0TC144ES	MUTE S
Q126	0TA144EK	MUTE S
Q181	25C2412K	NICAM



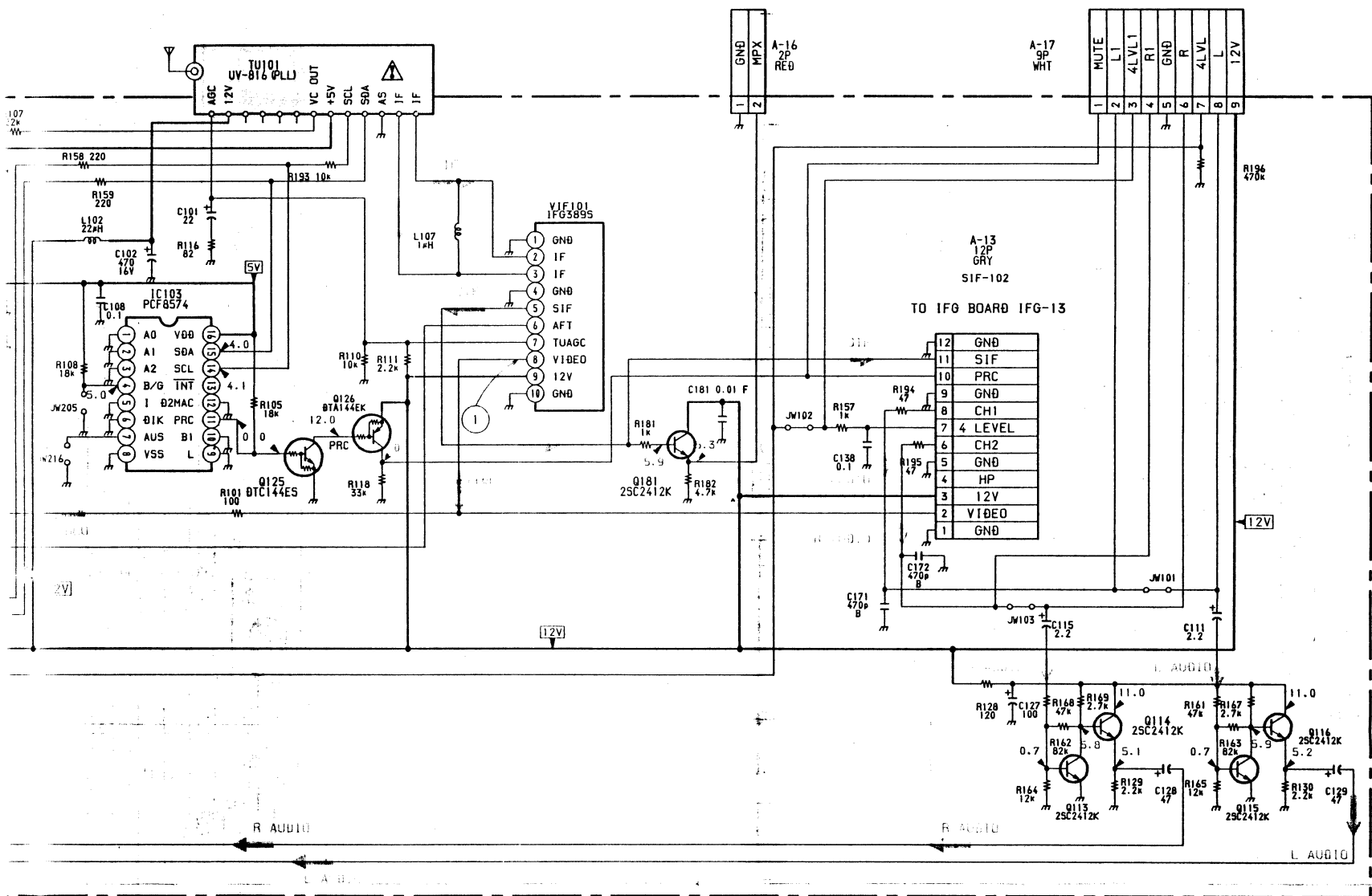
• H2 BOARD

IC1651	SBX1610-11	INFRARED RECIVER
01651	L0-201VR	AUDIO CHANNEL A INDICATOR
01652	L0-201VR	AUDIO CHANNEL B INDICATOR
01654	L0-201VR	RESET



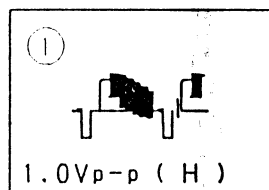
• VM BOARD (KV-C2951D ONLY)

Q751	JC501	REF AMP
Q752	JC501	REF AMP
Q753	25B734	PUSH-PULL OUT
Q754	250774	PUSH-PULL OUT



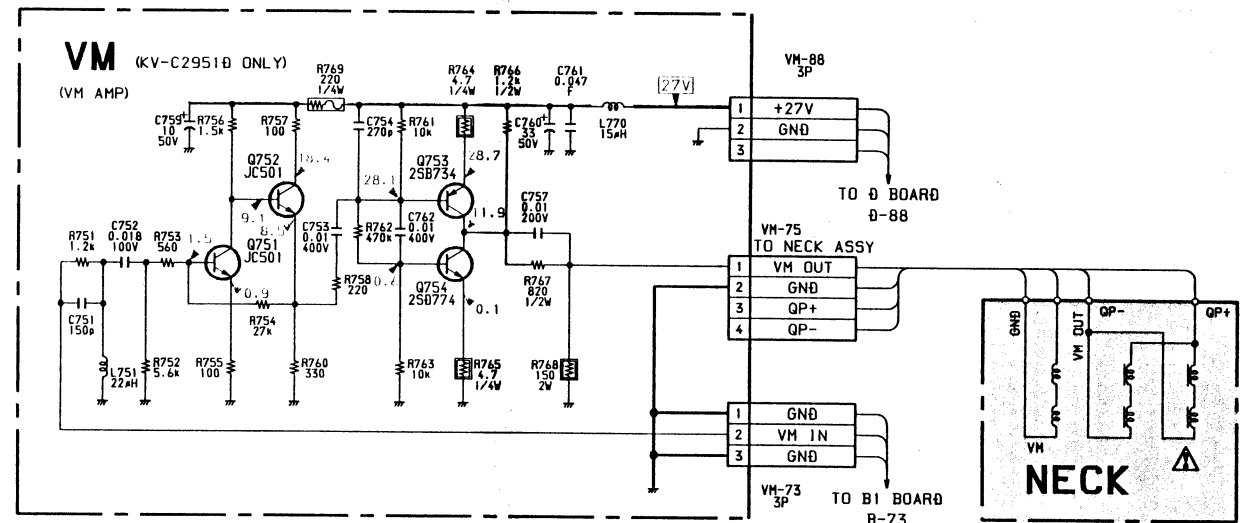
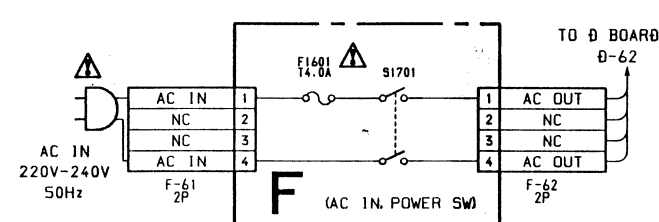
**J1**  
(AUDIO CONTROL,  
AV INPUT, Y/C INPUT,  
SCART VIDEO OUT,  
EAST-WEST CORRECTION)

• WAVEFORMS A BOARD



• A BOARD

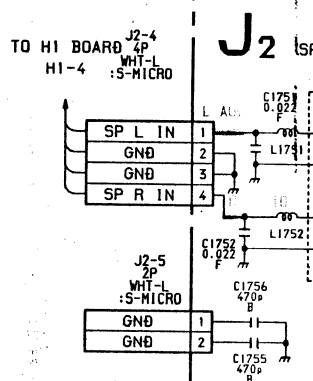
IC103	PCF8574	EXPANDER
Q113	2SC2412K	AUDIO AMP
Q114	2SC2412K	AUDIO AMP
Q115	2SC2412K	AUDIO AMP
Q116	2SC2412K	AUDIO AMP
Q125	0TC144ES	MUTE SW
Q126	0TA144EK	MUTE SW
Q181	2SC2412K	NICAM BUFFER



• VM BOARD (KV-C2951D ONLY)

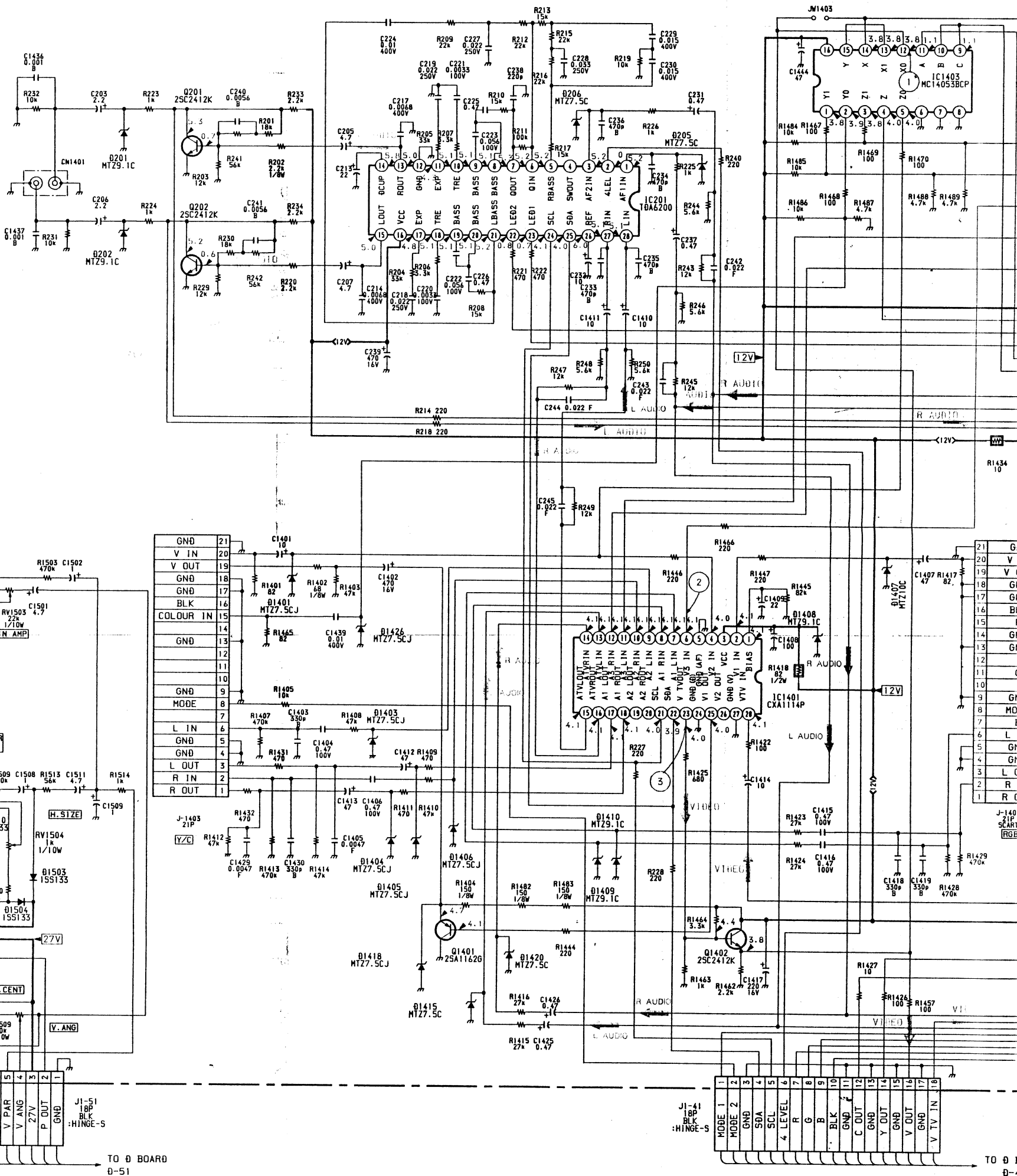
Q751	JC501	REF AMP
Q752	JC501	REF AMP
Q753	2SB734	PUSH-PULL OUT
Q754	2SD774	PUSH-PULL OUT

EL A INDICATOR
EL B INDICATOR

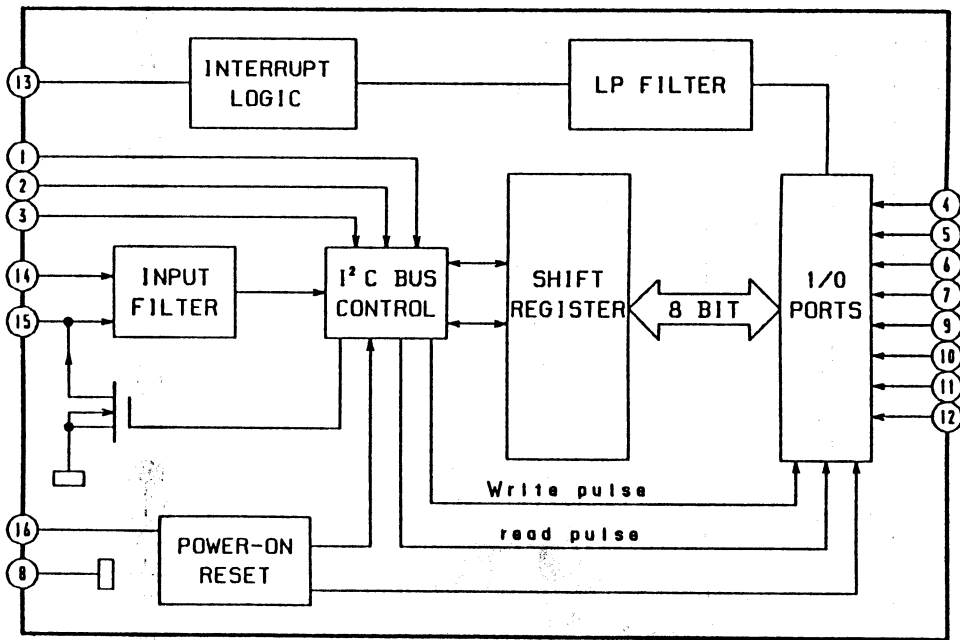


J1

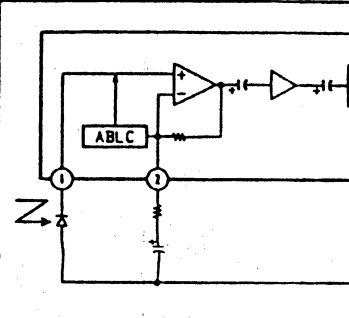
(AUDIO CONTROL,  
AV INPUT, Y/C INPUT,  
SCART VIDEO OUT,  
EAST-WEST CORRECTION)

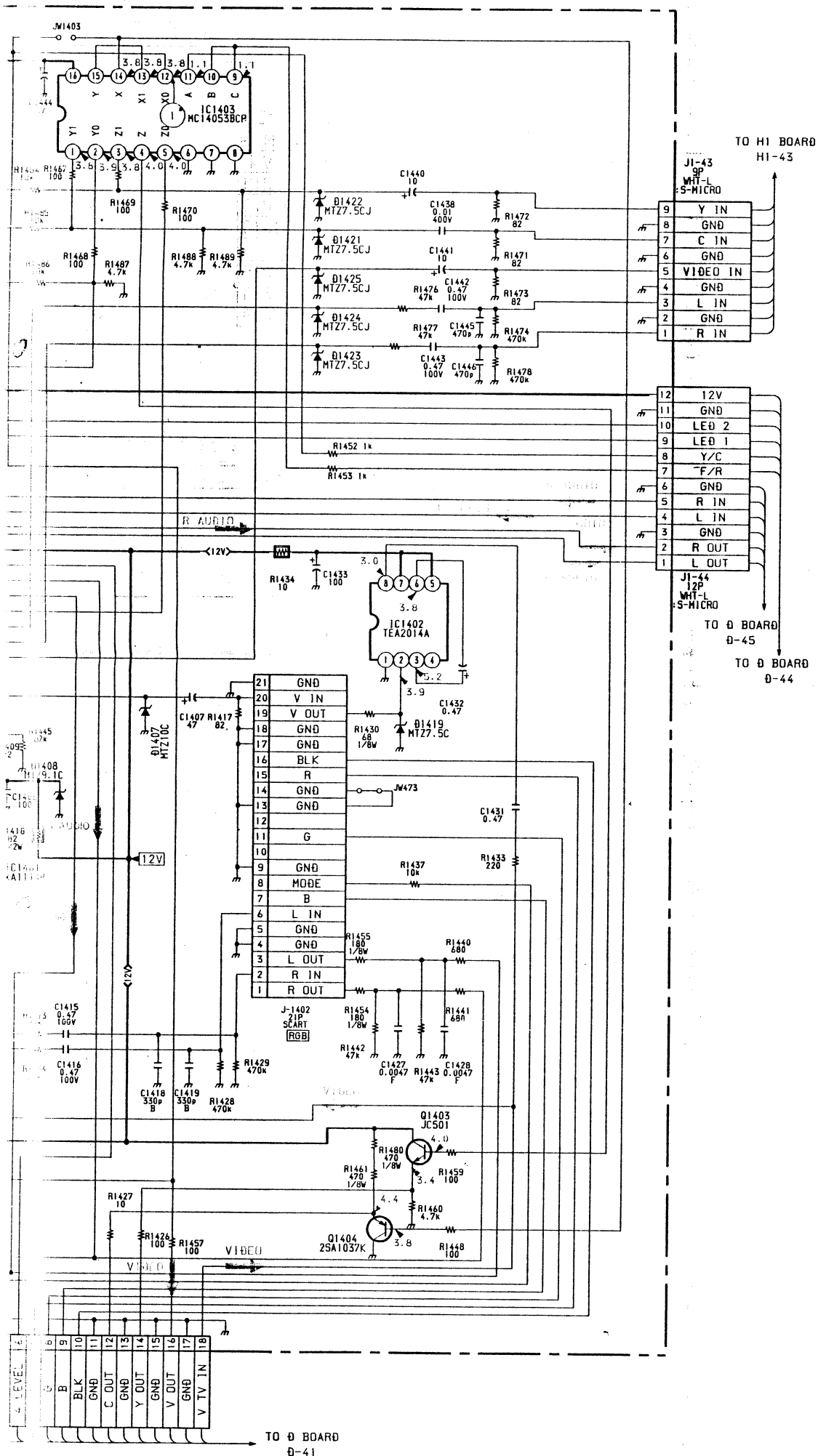


A BOARD IC103 PCF8574



H2 BOARD IC1651 SBX1610





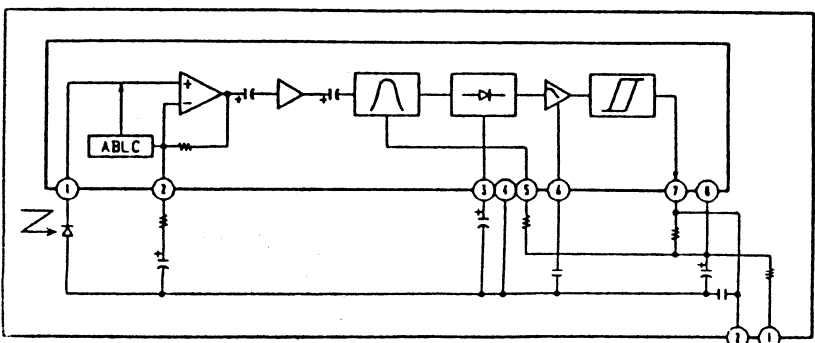
• J1 BOARD

\* MARK

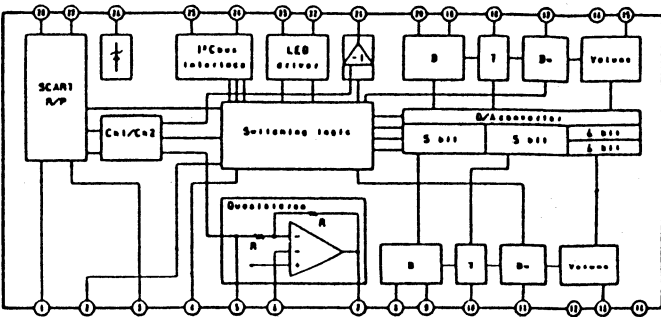
KV-C2551D	KV-C2951D
C1512 0.0068 400V	C1512
C1514 0.022 250V	C1514
C1515 820P	C1515
R1515 680K	R1515
R1520 470K	R1520 390K
R1550 JW	R1550 1 1W :RS

NOT MOUNTED

H2 BOARD IC1651 SBX1610-11



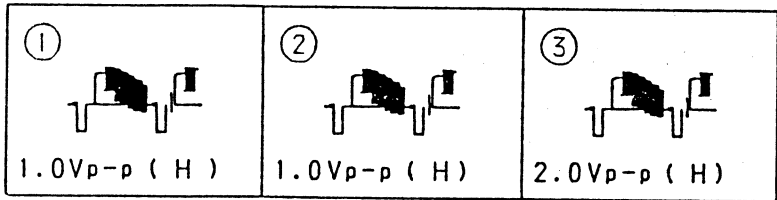
J1 BOARD IC201 TDA6200



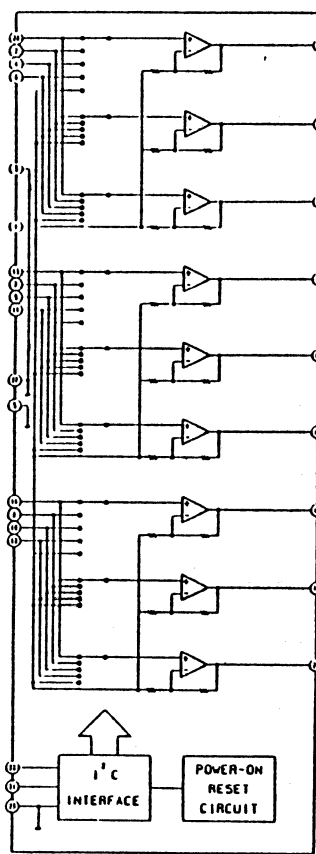
• J1 BOARD

IC201	TDA6200	AUDIO CONTROL
IC1401	CXA1114P	AV SW
IC1402	TEA2014A	SCART VIDEO OUT
IC1403	MC14053BCP	COMPOSITE Y/C SW
IC1501	TEA2031A	EAST-WEST CORRECTION
Q201	2SC2412K	AUDIO R BUFF
Q202	2SC2412K	AUDIO L BUFF
Q1401	2SA1037K	VIDEO OUT
Q1402	2SC2412K	VIDEO OUT BUFF
Q1403	2SC2412K	Y OUT BUFF
Q1404	2SA1037K	C OUT BUFF
Q201	MTZJ-T-77-9.1C	PROTECT
Q202	MTZJ-T-77-9.1C	PROTECT
Q205	MTZJ-T-77-7.5C	PROTECT
Q206	MTZJ-T-77-7.5C	PROTECT
Q1401	MTZJ-T-77-7.5C	PROTECT
Q1403	MTZJ-T-77-7.5C	PROTECT
Q1404	MTZJ-T-77-7.5C	PROTECT
Q1405	MTZJ-T-77-7.5C	PROTECT
Q1406	MTZJ-T-77-7.5C	PROTECT
Q1407	MTZJ-T-77-10C	PROTECT
Q1408	MTZJ-T-77-9.1C	REG
Q1409	MTZJ-T-77-9.1C	PROTECT
Q1410	MTZJ-T-77-9.1C	PROTECT
Q1415	MTZJ-T-77-7.5C	PROTECT
Q1418	MTZJ-T-77-7.5C	PROTECT
Q1419	MTZJ-T-77-7.5C	PROTECT
Q1420	MTZJ-T-77-7.5C	PROTECT
Q1421	MTZJ-T-77-7.5C	PROTECT
Q1422	MTZJ-T-77-7.5C	PROTECT
Q1423	MTZJ-T-77-7.5C	PROTECT
Q1424	MTZJ-T-77-7.5C	PROTECT
Q1425	MTZJ-T-77-7.5C	PROTECT
Q1426	MTZJ-T-77-7.5C	PROTECT
Q1501	RGP10G	PROTECT
Q1502	ISS133	DECOUPLING H SIZE
Q1503	ISS133	CLIPPING V PARABORA
Q1504	ISS133	CLIPPING H PULSE
Q1505	ISS133	REG
Q1506	MTZJ-T-77-36D	PROTECT
Q1507	ISS133	PROTECT
Q1510	ISS133	REG

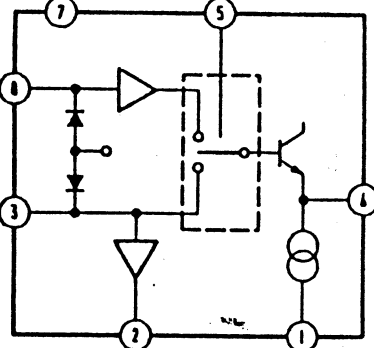
• WAVEFORMS J1 BOARD



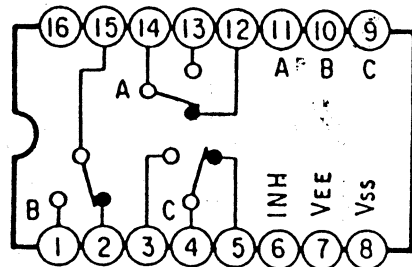
J1 BOARD IC1401 CXA1114P



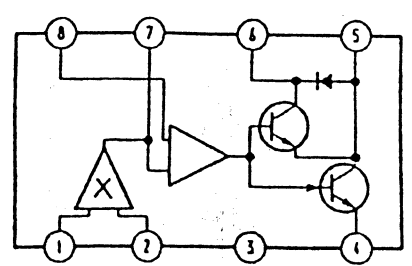
J1 BOARD IC1402 TEA2014A



J1 BOARD IC1403 MC14053BCP



J1 BOARD IC1501 TEA2031A





• WAVEFORMS B1 BOARD

① PAL  5.4Vp-p (H)	① SECAM  4.8Vp-p (H)	① NTSC3.58/ NTSC4.43  5.6Vp-p (H)	② PAL  5.4Vp-p (H)
② SECAM  4.8Vp-p (H)	② NTSC3.58/ NTSC4.43  5.6Vp-p (H)	③ PAL  5.4Vp-p (H)	③ SECAM  5.0Vp-p (H)
③ NTSC3.58/ NTSC4.43  6.2Vp-p (H)	④  10.5Vp-p (H)	⑤ PAL  0.4Vp-p (H)	⑤ SECAM  0.3Vp-p (H)
⑤ NTSC3.58/ NTSC4.43  0.6Vp-p (H)	⑥ PAL/SECAM  1.1Vp-p (H)	⑥ NTSC3.58/ NTSC4.43  1.2Vp-p (H)	⑦ PAL/SECAM  1.4Vp-p (H)
⑦ NTSC3.58/ NTSC4.43  1.4Vp-p (H)	⑧ PAL  0.4Vp-p (H)	⑧ SECAM  1.0Vp-p (H)	⑧ NTSC3.58/ NTSC4.43  0.8Vp-p (H)
⑨ PAL  0.7Vp-p (H)	⑨ SECAM  1.4Vp-p (H)	⑨ NTSC3.58/ NTSC4.43  0.85Vp-p (H)	⑩ SECAM  0.2Vp-p (H)
⑪ SECAM  1.2Vp-p (H)	⑫ PAL  0.16Vp-p (H)	⑫ SECAM  0.2Vp-p (H)	⑫ NTSC3.58/ NTSC4.43  0.3Vp-p (H)
⑬ PAL  1.0Vp-p (H)	⑬ SECAM  0.8Vp-p (H)	⑬ NTSC3.58  0.9Vp-p (H)	⑬ NTSC4.43  0.95Vp-p (H)
⑭ PAL  0.8Vp-p (H)	⑭ SECAM  0.7Vp-p (H)	⑭ NTSC3.58  0.6Vp-p (H)	⑭ NTSC4.43  0.8Vp-p (H)
⑮ PAL  0.7Vp-p (H)	⑮ SECAM NTSC3.58 NTSC4.43  0.5Vp-p (H)	⑯  0.9Vp-p (H)	⑰ PAL  1.9Vp-p (H)
⑰ SECAM NTSC3.58 NTSC4.43  0.1Vp-p (H)	⑱ PAL  0.2Vp-p (H)	⑱ SECAM  0.8Vp-p (H)	⑲ PAL  0.6Vp-p (H)
⑲ SECAM  0.8Vp-p (H)	⑲ NTSC3.58/ NTSC4.43  0.9Vp-p (H)		

As to the voltage value shown by the mark ※ on the Schematic Diagram, see the another list.

IC-NO	PIN-NO	PAL	SECAM	NTSC 3.38	NTSC 4.43
IC301	(5)	6.7	4.8	4.8	4.8
	(15)	8.9	7.0	7.0	7.0
	(19)	3.4	3.4	3.8	3.4
	(16)	6.6	6.6	6.0	6.3
	(1)	0.1	6.8	6.9	6.8
IC304	(5)	9.9	0	9.9	9.9
	(7)	4.6	0	4.6	4.6
	(8)	3.4	3.0	3.4	3.4
	(9)	3.4	3.0	3.4	3.4
	(10)	4.6	3.4	4.6	4.6
	(11)	2.3	3.1	3.1	2.3
	(12)	5.6	5.6	5.6	7.4
	(13)	7.5	7.5	5.7	5.7
	(25)	0.1	0.1	0.1	6.0
	(26)	0.1	0.1	6.0	0.1
	(27)	0.1	6.0	0.1	0.1
	(28)	6.0	0.1	0.1	0.1

Q-NO		PAL	SECAM	NTSC 3.38	NTSC 4.43
Q338	B	2.4	3.9	3.9	3.9
	E	3.0	4.6	4.6	4.6
Q339	B	3.0	4.6	4.6	4.6
	E	2.4	3.9	3.9	3.9
Q341	B	0	0.6	0.4	0.1
	C	11.6	0	11.6	11.6
Q342	B	0	0	0.4	0
	C	11.7	0	11.7	11.7
Q343	B	3.4	5.4	5.3	5.3
	E	2.8	4.7	4.7	4.7
Q344	B	0	5.4	1.0	0.1
	E	4.4	4.8	1.5	4.5
Q345	B	5.0	0.1	1.9	5.0
	E	4.4	4.4	1.4	4.4
Q347	B	0.6	0	0	0
	C	0.1	11.9	11.9	11.9
Q348	B	0.1	0.1	1.0	0.1
	C	1.3	0.2	0.2	0.4

• B1 BOARD

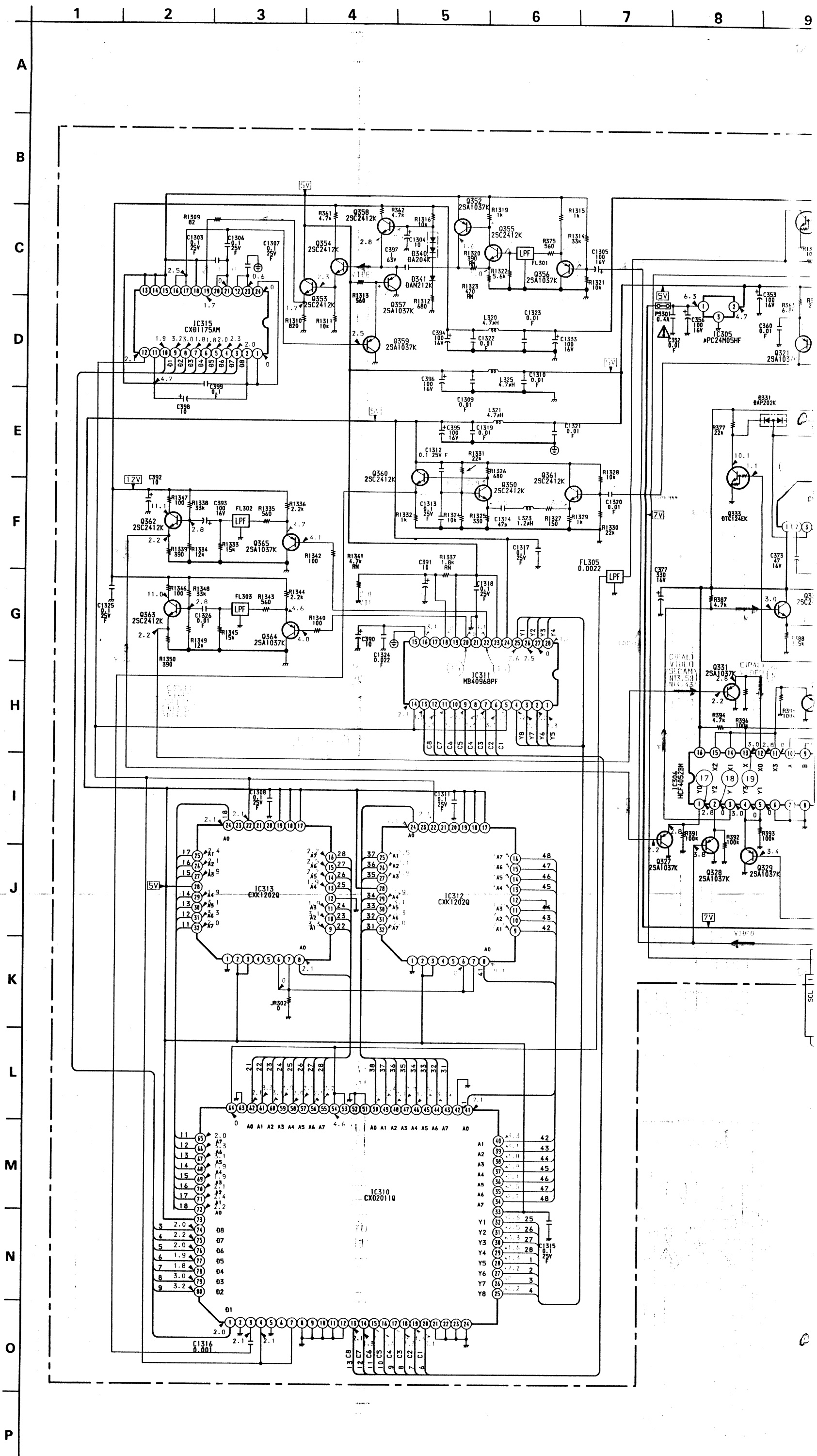
IC301	TDA4580-V6	VIDEO PROCESSOR
IC302	TDA8442-N3	D/A CONVERTER
IC303	TDA4660T	1H DELAY
IC304	TDA4650WP	COLOR PROCESSOR
IC305	μPC24M05HF	REGULATOR
IC306	HCF4052BM	Y/C SW
IC308	CX20061	Y INTERRUPT
IC310	CX02011Q	COMB CONTROL
IC311	MB40968PF	D/A CONVERTER
IC312	CXK1202Q	MEMORY
IC313	CXK1202Q	MEMORY
IC315	CX01175AM	A/D CONVERTER
Q301	25C2412K	CANAL +BLK
Q302	25C2412K	ON SCREEN DISPLAY SW
Q303	25C2412K	FAS PICTURE MUTE SW
Q304	25C2412K	ON SCREEN DISPLAY SW
Q305	0TA144EK	ANIT PRIORITY SCART
Q306	25C2412K	STBY SW
Q307	25C2412K	ABL
Q308	0TC124EK	MUTE
Q310	0TC124EK	SECAM SW
Q311	0TC124EK	SECAM SW
Q320	25C2412K	HUE BUFFER
Q321	2SA1037K	CLK AMP3
Q322	2SA1037K	CLK AMP2
Q323	25C2412K	CLK AMP1
Q324	25C2412K	CLK BUFFER
Q327	2SA1037K	Y OUT
Q328	2SA1037K	VIDEO IN
Q329	2SA1037K	Y IN
Q330	25C2412K	VIDEO BUFFER
Q331	2SA1037K	C OUT
Q332	2SA1037K	C IN
Q333	0TC124EK	Y/C SW
Q334	0TC124EK	Y SW
Q335	25C2412K	SECAM SW
Q336	25C2412K	NTSC (3.58) SW
Q337	25C2412K	NTSC (4.43) SW
Q338	2SA1037K	Y BUFFER
Q339	25C2412K	Y BUFFER
Q340	25C2412K	Y BUFFER
Q341	25C2412K	SECAM TRAP SW
Q342	25C2412K	NTSC TRAP SW
Q343	25C2412K	C OUT
Q344	25C2412K	SECAM SW
Q345	25C2412K	PAL/SECAM SW
Q346	25C2412K	Y IN
Q347	25C2412K	PAL SW
Q348	0TC124EK	NTSC (3.58) SW
Q350	25C2412K	CLK AMP
Q352	2SA1037K	VIDEO AMP
Q353	25C2412K	BUFFER
Q354	25C2412K	BUFFER
Q355	25C2412K	VIDEO AMP
Q356	2SA1037K	VIDEO BUFFER
Q357	2SA1037K	CLAMP BIAS
Q358	25C2412K	VIDEO CLAMP
Q359	2SA1037K	CLAMP BIAS
Q360	25C2412K	CLK BUFFER
Q361	25C2412K	CLK AMP
Q362	25C2412K	Y BUFFER
Q363	25C2412K	C BUFFER
Q364	2SA1037K	C BUFFER
Q365	2SA1037K	Y BUFFER
Q366	25C2412K	SHP BUFFER
Q367	25C2412K	Y BUFFER
Q368	25C2412K	SHP AMP
Q369	25C2412K	SHP AMP
Q370	25C2412K	SHP AMP
Q371	25C2412K	VM BUFFER
Q372	25C2412K	VM AMP
Q373	0TC124EK	SYSTEM SW
Q1301	0TC124EK	Y BUFFER
Q1302	25C2412K	Y BUFFER
Q1303	0TC124EK	VM MUTE
0301	1MN10	ACO AT STBY
0304	0AN212K	PROTECT
0305	0AN212K	PROTECT
0307	MA3110M	PROTECT
0308	0AN212K	PROTECT
0309	0AN212K	PROTECT
0310	MA3110M	PROTECT
0311	MA3110M	PROTECT
0312	MA3110M	PROTECT
0314	0A204K	PROTECT
0318	0A204K	PROTECT
0319	0A204K	PROTECT
0320	0A204K	PROTECT
0321	MA3056	REG
0322	0AN202K	PROTECT
0330	0AN212K	BIAS
0331	0AP202K	Y/C SW
0333	1MN10	SYSTEM SW
0336	0AN202K	CORRECT SW
0340	0A204K	VIDEO AMP
0341	0AN212K	VIDEO AMP

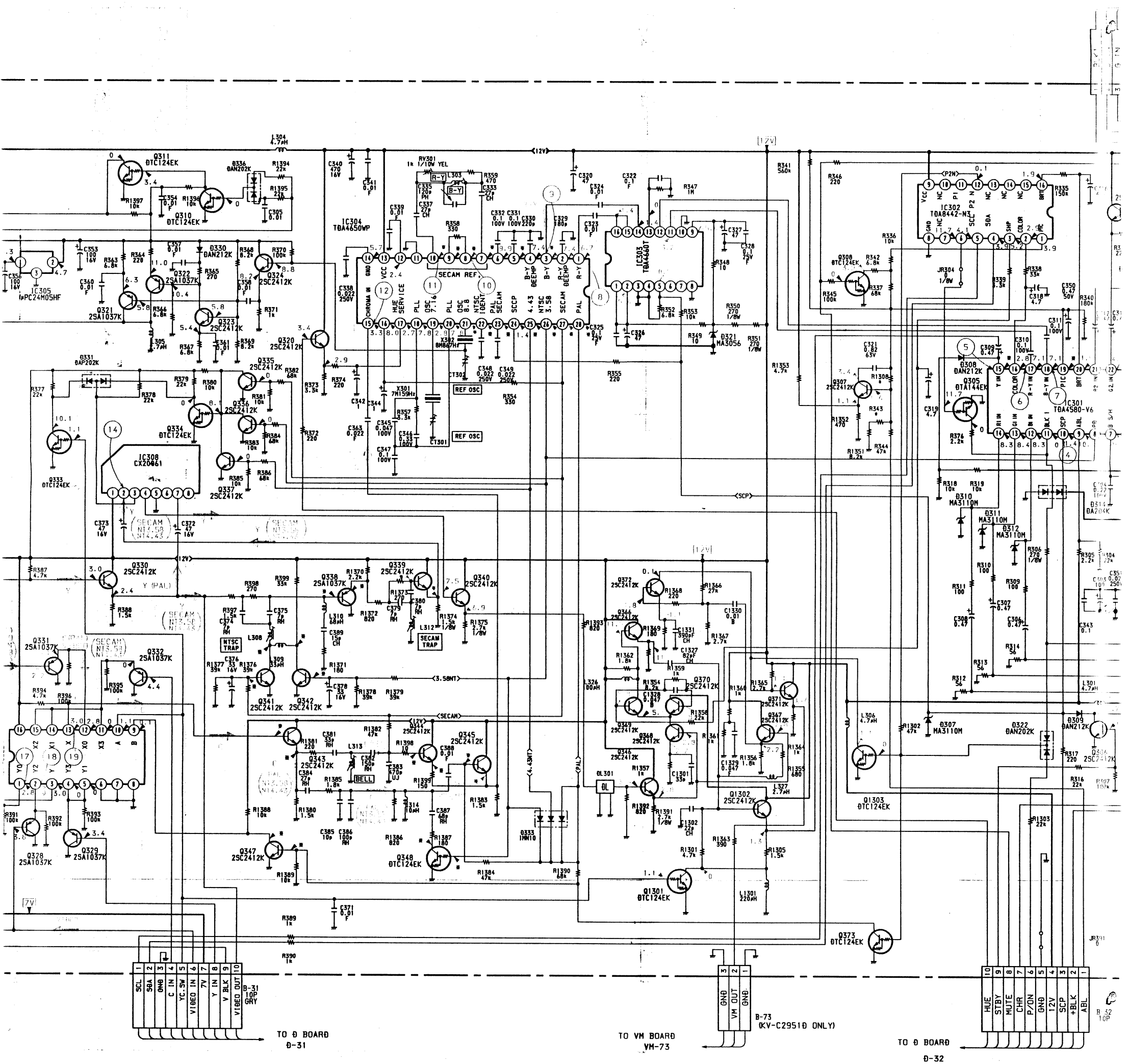
• B1 BOARD

\* MARK

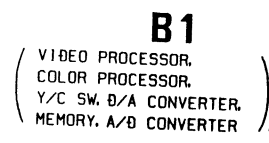
KV-C2551D	KV-C2951D
R343 560 1/10W	R343 2.2k 1/10W
R1308 0 1/10W	R1308 4.7k 1/10W
B-73 OPEN	B-73 3P

KV-C2951D
343 2.2k 1/10W
1308 4.7K 1/10W
-73 3P







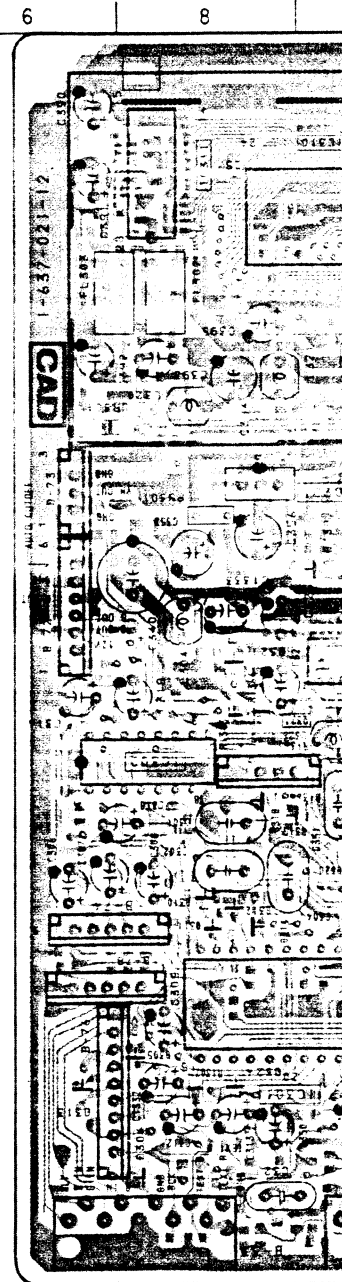
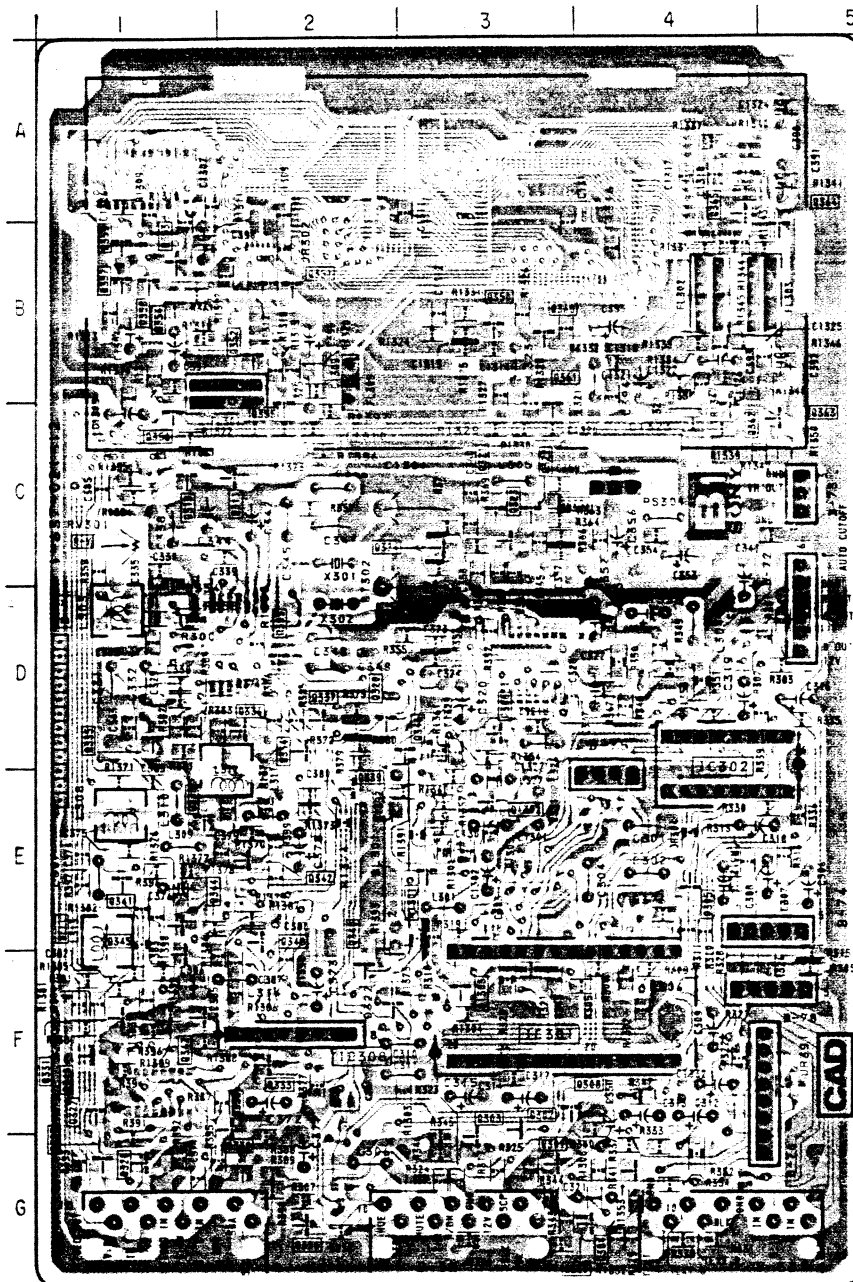


**B1**VIDEO PROCESSOR, COLOR PROCESSOR,  
Y/C SW, D/A CONVERTER, MEMORY,  
CONVERTER

—B1 Board—

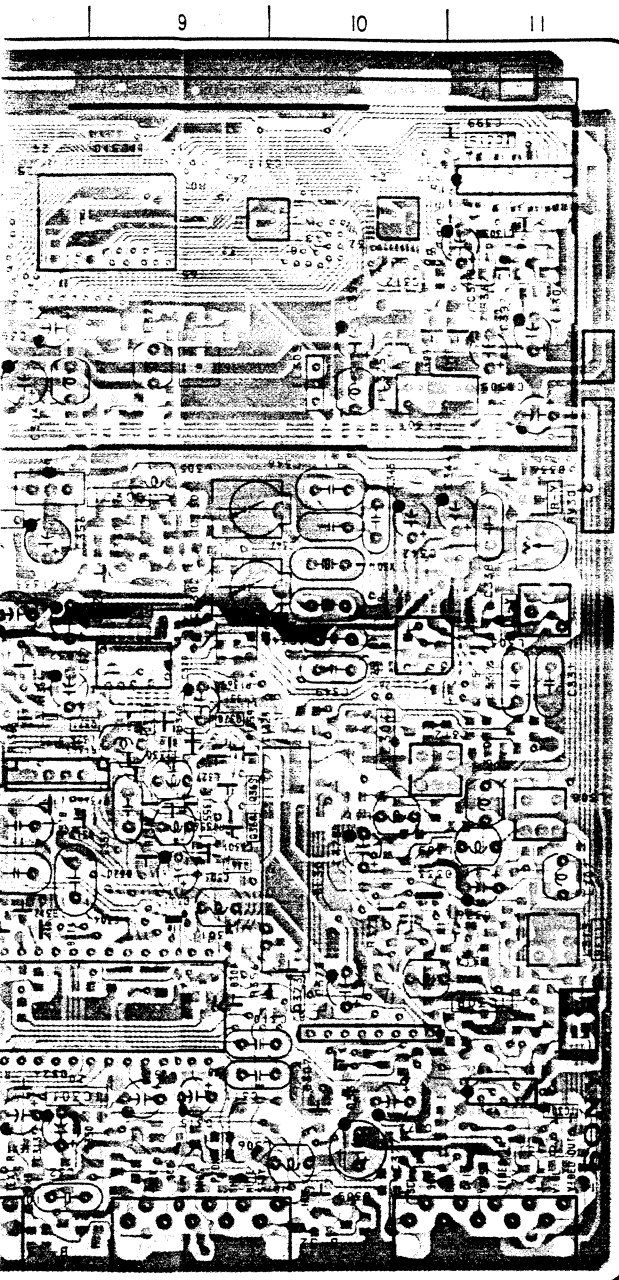
Note :

- 
- 



Note:

- : Pattern from the side which enables seeing.
- : Pattern of the rear side.



IC			
IC301	F-8	Q362	C-4
IC302	E-8	Q363	C-5
IC303	D-9	Q364	B-5
IC304	D-10	Q365	A-4
IC305	C-8	Q366	D-3
IC306	F-11	Q367	E-9
IC308	F-10	Q368	E-9
IC310	A-9	Q369	E-9
IC311	A-8	Q370	D-9
IC312	A-10	Q371	D-9
IC313	A-9	Q372	D-9
IC315	A-11	Q373	F-10
		Q1301	E-3
		Q1302	E-3
		Q1303	F-3

TRANSISTOR		DIODE	
Q301	G-3	D301	E-9
Q302	F-3	D304	G-8
Q303	F-3	D305	F-8
Q304	G-4	D307	F-10
Q305	E-4	D308	F-9
Q306	G-2	D309	G-10
Q307	G-4	D310	E-8
Q308	F-3	D311	E-8
Q310	C-1	D312	E-8
Q311	C-2	D314	E-8
Q320	D-2	D318	E-8
Q321	C-3	D319	E-8
Q322	C-3	D320	E-9
Q323	C-3	D321	D-8
Q324	C-3	D322	F-2
Q327	F-1	D330	D-9
Q328	G-1	D331	F-10
Q329	G-1	D333	E-10
Q330	F-2	D336	C-11
Q331	F-1	D340	B-10
Q332	G-2	D341	B-11
Q333	F-2		
Q334	D-2		
Q335	D-1		
Q336	D-2		
Q337	D-2		
Q338	E-1		
Q339	E-2		
Q340	F-2		
Q341	E-1		
Q342	E-2		
Q343	F-1		
Q344	E-1		
Q345	F-1		
Q346	D-3		
Q347	F-1		
Q348	E-2		
Q350	B-3		
Q352	B-2		
Q353	B-1		
Q354	B-1		
Q355	C-2		
Q356	C-1		
Q357	B-1		
Q358	B-1		
Q359	B-1		
Q360	B-3		
Q361	C-3		

VARIABLE RESISTOR	
RV301	C-11

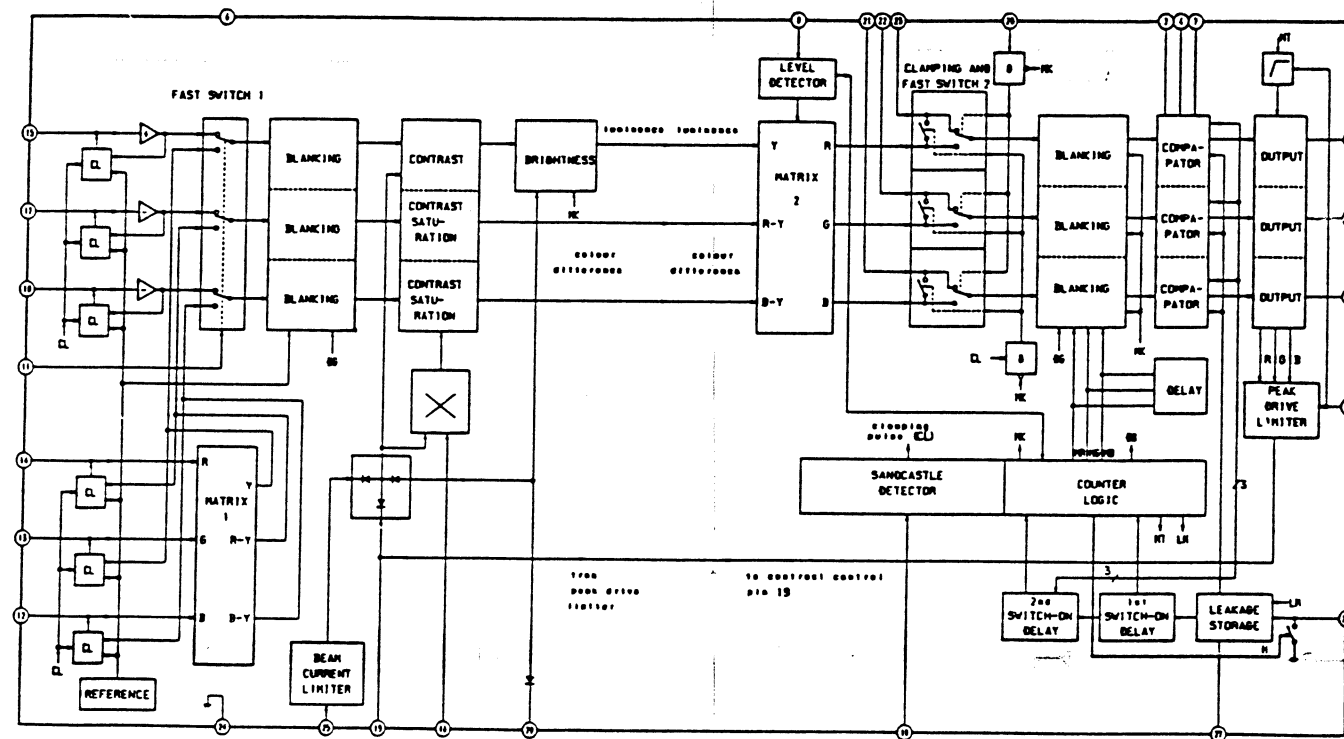
  

TRIMMER	
CT301	C-9
CT302	C-9

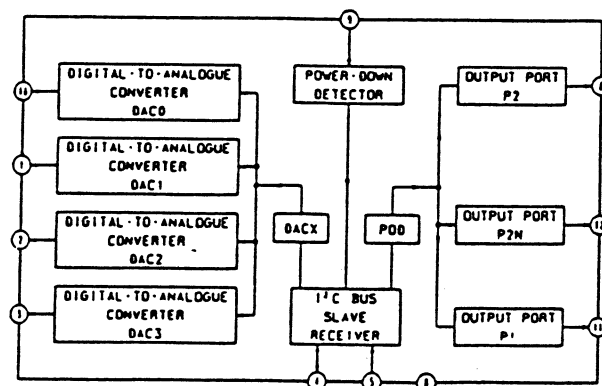
  

COIL	
L303	D-11
L308	E-11
L312	D-10
L313	E-11

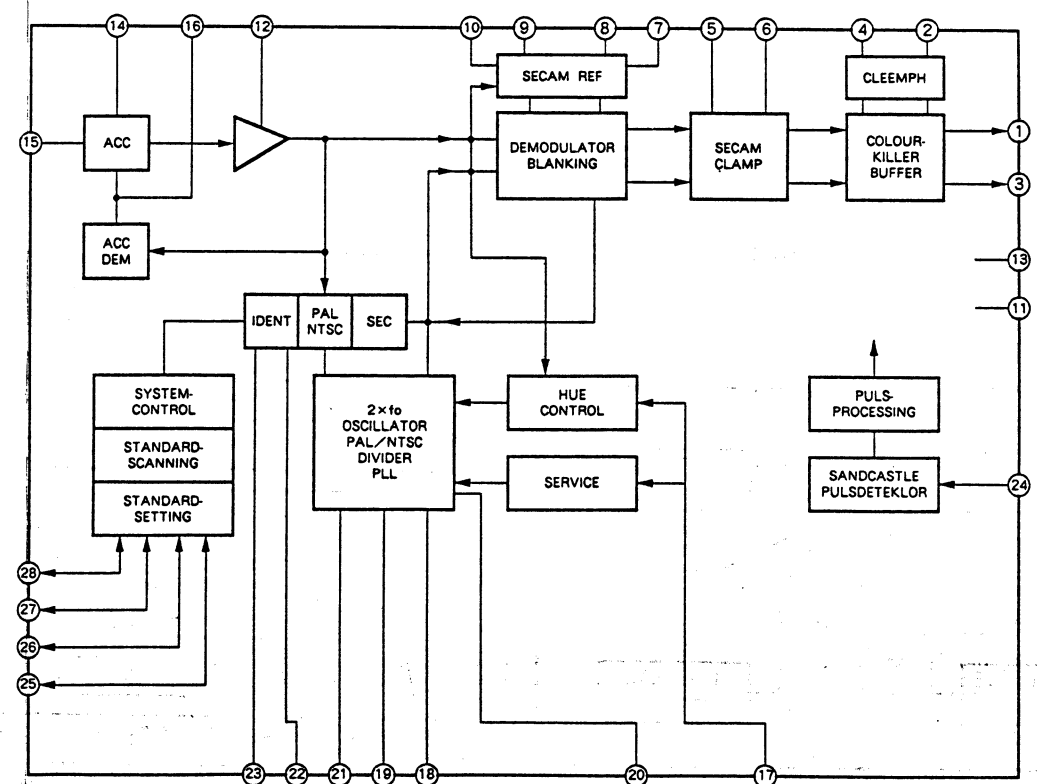
B1 BOARD IC301 TDA4580-V6



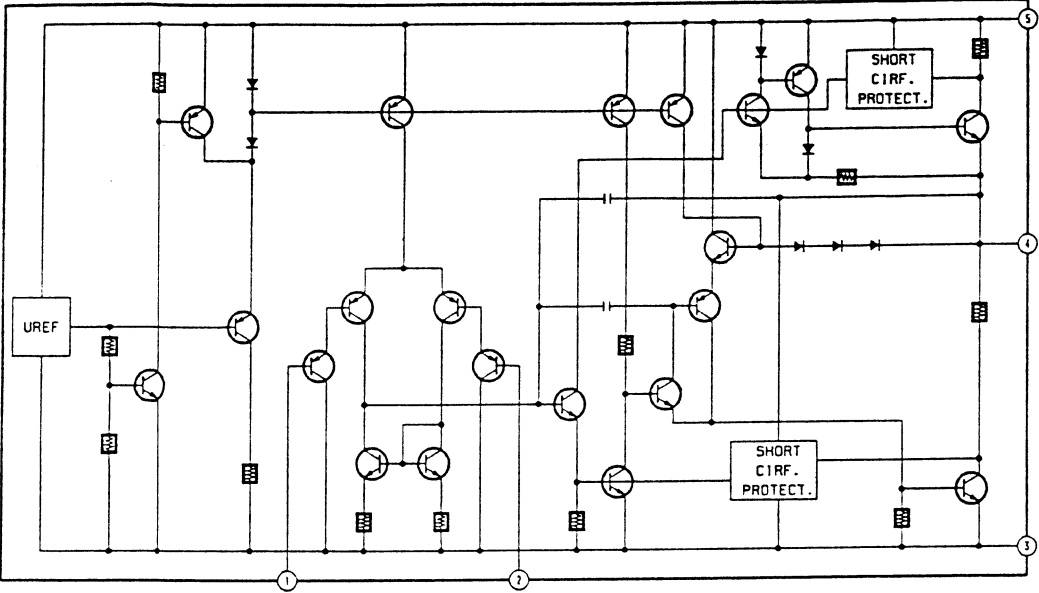
B1 BOARD IC302 TDA8442-N3



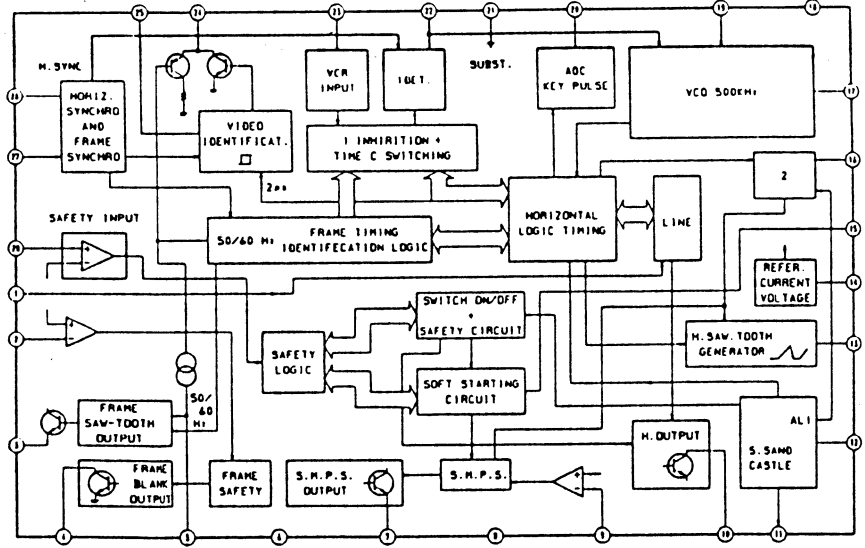
B1 BOARD IC303 TDA4660T



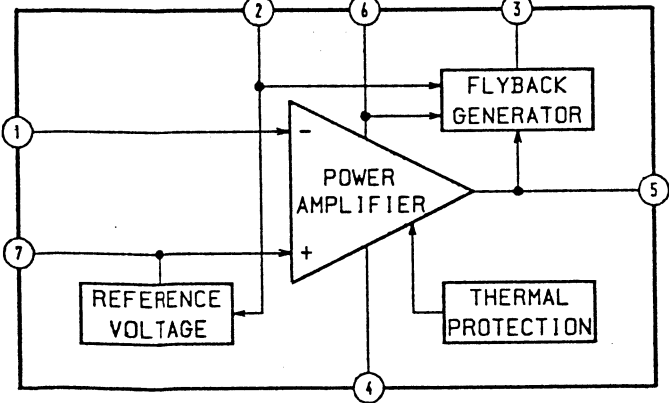
D BOARD IC251/261 TDA2050



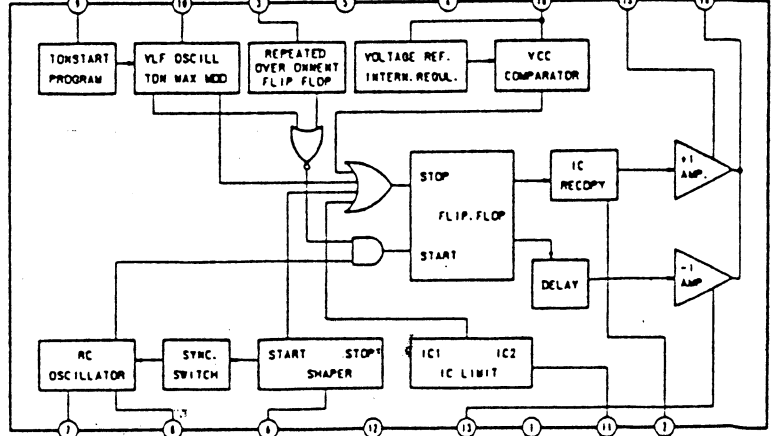
D BOARD IC501 TEA2028B

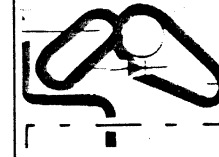


D BOARD IC502 TDA8170



D BOARD IC601 TEA2260



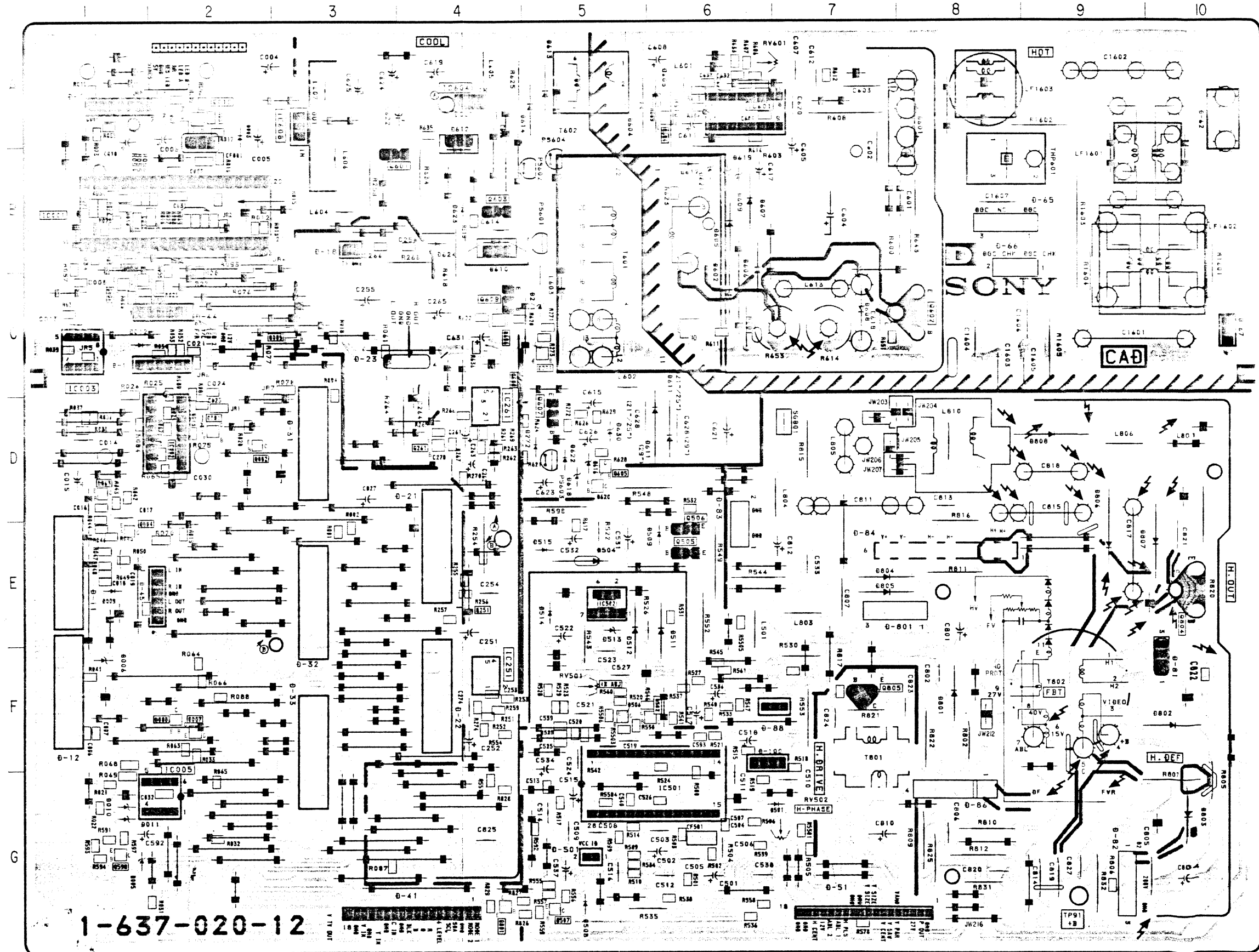
**D** [TUNING CONTROL, POWER CONTROL,  
AUDIO OUT, H/V OUT]

## NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

-D Board-

IC		D013	D-2
IC001	B-1	D271	C-5
IC002	D-2	D272	D-5
IC003	C-1	D501	G-6
IC005	G-2	D506	F-5
IC251	F-4	D508	G-5
IC261	D-4	D509	E-6
IC501	G-6	D511	E-6
IC502	E-5	D512	E-5
IC601	A-6	D513	E-5
IC604	A-4	D514	E-5
IC608	A-3	D515	E-5
TRANSISTOR		D601	A-8
Q001	D-2	D602	C-6
Q002	D-2	D603	A-6
Q003	D-1	D604	D-5
Q004	E-1	D605	B-6
Q005	C-1	D606	B-6
Q006	C-1	D607	B-6
Q007	F-2	D608	C-7
Q008	F-2	D609	B-6
Q009	C-3	D610	B-4
Q010	A-2	D611	D-6
Q251	E-4	D612	A-4
Q261	D-4	D613	A-5
Q271	C-5	D614	A-5
Q502	F-5	D616	D-5
Q505	E-6	D617	B-6
Q506	E-6	D618	D-5
Q507	G-5	D619	B-6
Q598	G-1	D620	D-5
Q601	B-3	D621	B-6
Q602	B-8	D622	D-5
Q603	B-4	D623	B-4
Q604	A-6	D624	B-4
Q605	D-5	D630	D-5
Q606	C-4	D801	F-8
Q607	D-5	D802	F-10
Q608	C-4	D803	G-10
Q609	C-4	D804	E-7
Q801	G-4	D805	E-7
Q804	E-10	D806	E-9
Q805	F-7	D808	D-9
DIODE		VARIABLE RESISTOR	
D003	A-2	RV501	F-5
D005	G-1	RV502	G-7
D006	F-1	RV601	A-7
D007	A-2	TP	
D009	E-1	TP91	G-9
D010	G-1		
D011	G-1		
D012	C-1		

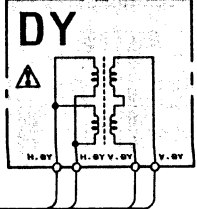


1-637-020-12





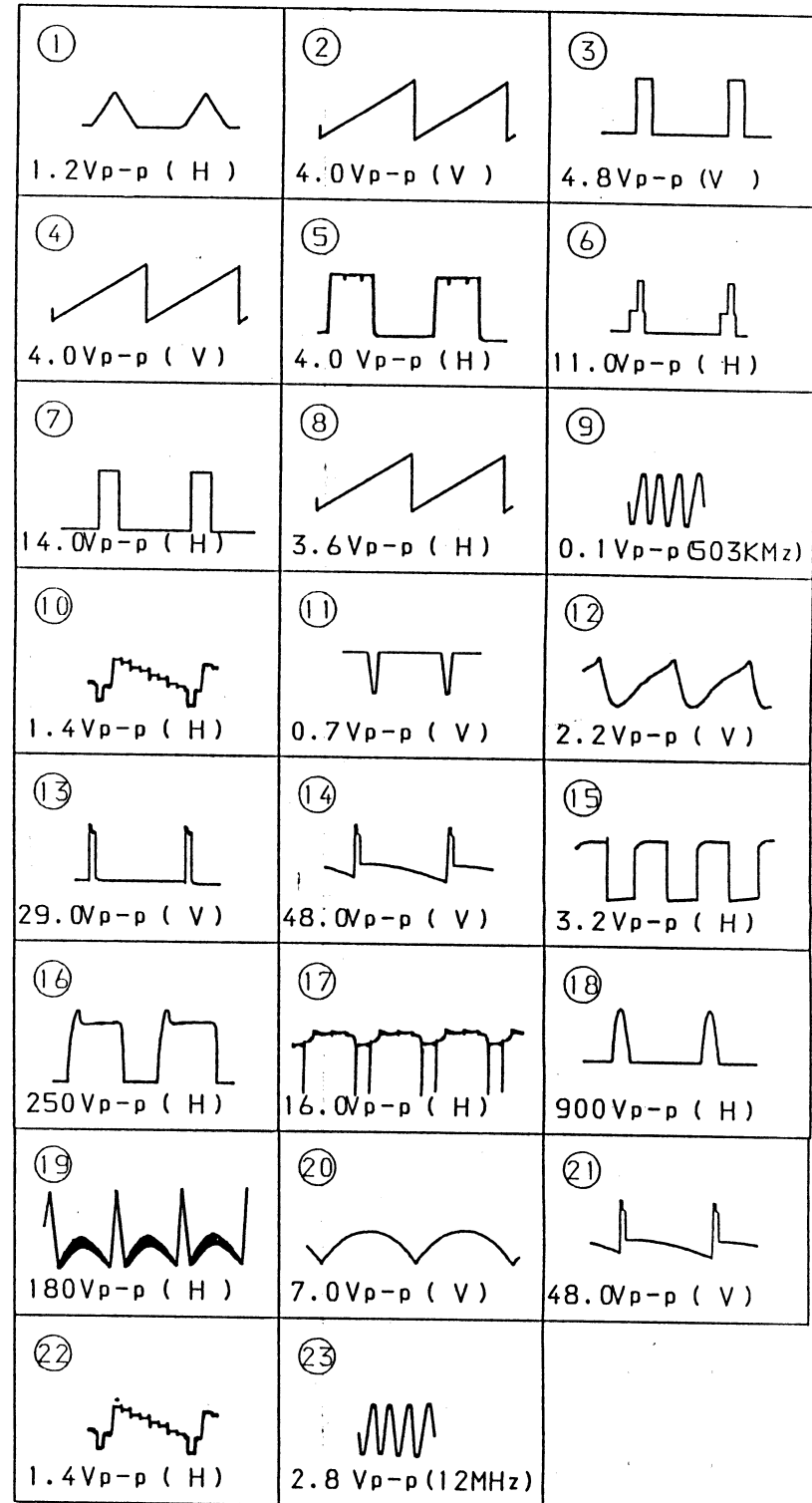
TO H2 BOARD  
H2-2



## • D BOARD

IC001	S0A20560-A008	TUNING CTL
IC002	MC14051BCP	ON SCREEN DISPLAY
IC003	BA4558	AFT COMPARETORE
IC005	S0A2546	MEMORY
IC251	T0A2050	AUDIO OUT (L)
IC261	T0A2050	AUDIO OUT (R)
IC501	TEA2028B	DEFLECTION PROCESSOR
IC502	T0A8170	V OUT
IC601	TEA2260	PRIMARY SMPS CTL
IC604	TEA7605	+5V REG
IC608	TYA7812CT	+12V REG
Q001	0TC144EK	50/60Hz SW
Q002	0TC144EK	BLK SW
Q003	2SA1037-K	SYNC SEPARATOR
Q004	2SA1037-K	SYNC SEPARATOR
Q005	0TC144EK	Y/C SW
Q006	0TC144EK	FRONT/REAR SW
Q007	2SC2412-K	MODE 2 SWITCH
Q008	2SC2412-K	MODE 1 SWITCH
Q009	2SC2412-K	MUTE SW
Q010	2SC2412-K	RESET
Q251	2SC2412-K	AUDIO MUTE
Q261	2SC2412-K	AUDIO MUTE
Q271	2SC2412-K	VOLTAGE DETECT
Q502	2SA1037-K	CONSTANT CURRENT SOURCE
Q505	2S0774-4	V CENT
Q506	2S0743-3	V CENT
Q507	2SA1037-K	CANAL +BLK
Q598	2SA1037-K	VIDEO AMP
Q601	2SB1357T114EF	STBY SW
Q602	2S01548	REG OUT
Q603	2SB1357T114EF	STBY SW
Q604	2SA1037-K	FAST ON/OFF
Q605	2SC2412-K	STBY SW
Q606	2SC2412-K	STBY SW
Q607	2S02096-EF	+12V REG
Q608	2SC2412-K	STBY SW
Q609	2S0789-3	STBY SW
Q801	2SC2412-K	ABL AMP
Q804	2S01941-06	H OUT
Q805	2SC2688	H DRIVER
0003	ISS133	HUE CTL
0005	MTZJ5.6B	PROT
0006	MTZJ33A	VC VOLTGE REGULATION
0007	MTZJ3.9B	PLOT RESET
0009	MTZJ5.6B	CLIPPING SYNC LEVEL
0010	MTZJ6.2B	PROT
0011	MTZJ6.2B	PROT
0012	ISS133	PROT
0013	MTZJ6.8C	PROT
0271	MTZJ13B	VOLTAGE DETECT
0272	ISS133	DECOUPING MUTE AUDIO
0501	ISS133	START
0504	GP080	V PULSE OUT
0506	0A204K	CURRENT (KV-C25510 ONLY)
0508	ISS133	CANEL +BLK LEVEL
0509	ISS133	V LIN
0511	GP080	PROT
0512	GP080	PROT
0513	MTZJ4.7B	PROT
0514	ISS133	PROT (KV-C29510 ONLY)
0515	ISS133	PROT (KV-C29510 ONLY)
0601	04SB60L-F	AC RECT
0602	RGP10G	REF RECT
0603	GP080	SMPS DRIVE 1
0604	GP080	SMPS DRIVE 2
0605	GP080	SMPS DRIVE 3
0606	RGP10G	+12V RECT
0607	RGP10G	REF RECT
0608	ERC25-06S	PLUSE CLIPPER
0609	MTZJ33A	FAST ON/OFF-1
0610	CTU-12S	+14V RECT
0611	ER029-08J	+135V RECT
0612	CTU-12S	+7V RECT
0613	RGP15J	AF V RECT-1
0614	RGP15J	AF V RECT-2
0616	MTZJ6.2B	+12V REF
0617	ISS133	PRIT
0618	MTZJ5.6B	+12V REF
0619	MTZJ33A	FAST ON/OFF-2
0620	0A204K	+12V REF
0621	MTZJ33A	FAST ON/OFF-3
0622	ISS133	PROT
0623	ISS133	DECOUPING STBY
0624	ISS133	DECOUPING STBY
0630	MTZJ15A	+12V REF
0801	RGP10G	+27V RECT
0802	RGP10G	+200V RECT
0803	RGP02-17	G2 RECT
0804	GP080	H CENTER-1
0805	GP080	H CENTER-2
0806	ERC06-15S	H DAMPER-1
0807	ERC06-15S	H DAMPER-2
0808	ER029-08J	PIN DAMPER

## • WAVEFORMS D BOARD



## • D BOARD

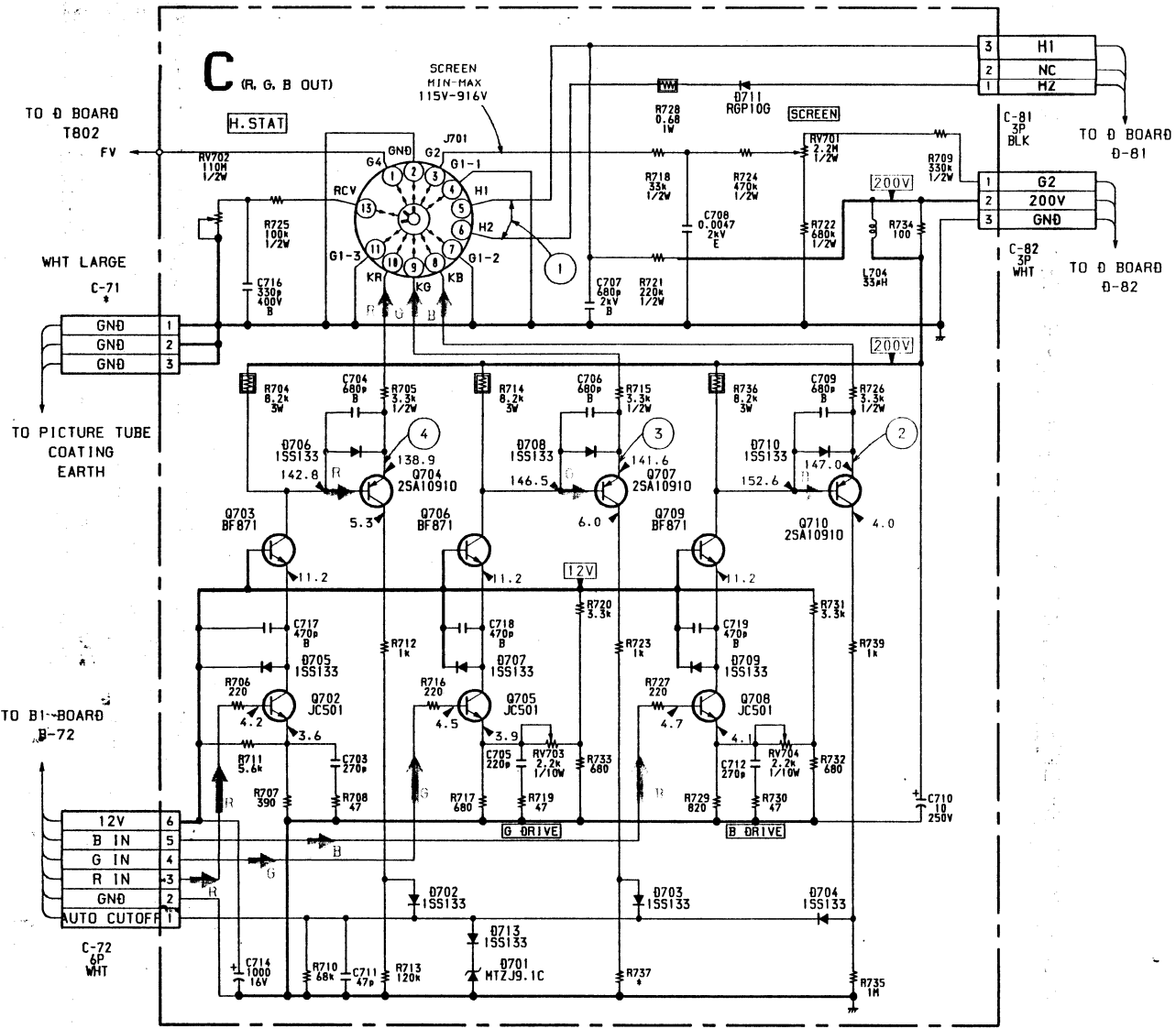
## \* MARK

KV-C25510	KV-C29510
C519 0.47	C519 0.33
C815 1	C815 0.82
C817 0.015	C817 0.017
C821 680p 2kV	C821 470p 2kV
0506 0A204K	0506
0514 JW	0514 ISS133
0515	0515 ISS133
0-88	0-88 3P
JW202	JW202 X
JW203 X	JW203
JW204 X	JW204
JW205	JW205 X
JW206 X	JW206
JW207 X	JW207
JW216 X	JW216
JW229 X	JW229
L801	L801 3.9mH
R525 1k	R525
R561	R561 270k
R570	R570 680
R607 4.7k	R607 5.6k
R812 68k	R812 51k
R5503 4.7	R5503 10
R5506	R5506 12K

— NOT MOUNTED  
X TO BE MOUNTED



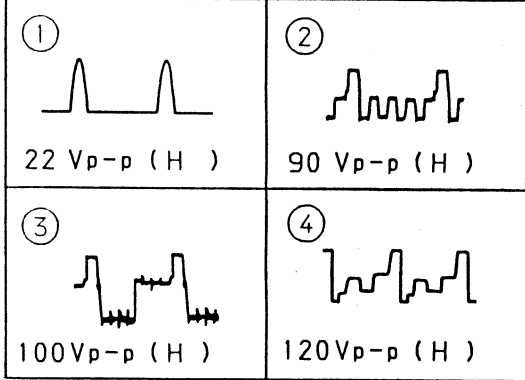
A  
B  
C  
D  
E  
F  
G  
H  
I  
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K  
L  
M  
N  
O  
P



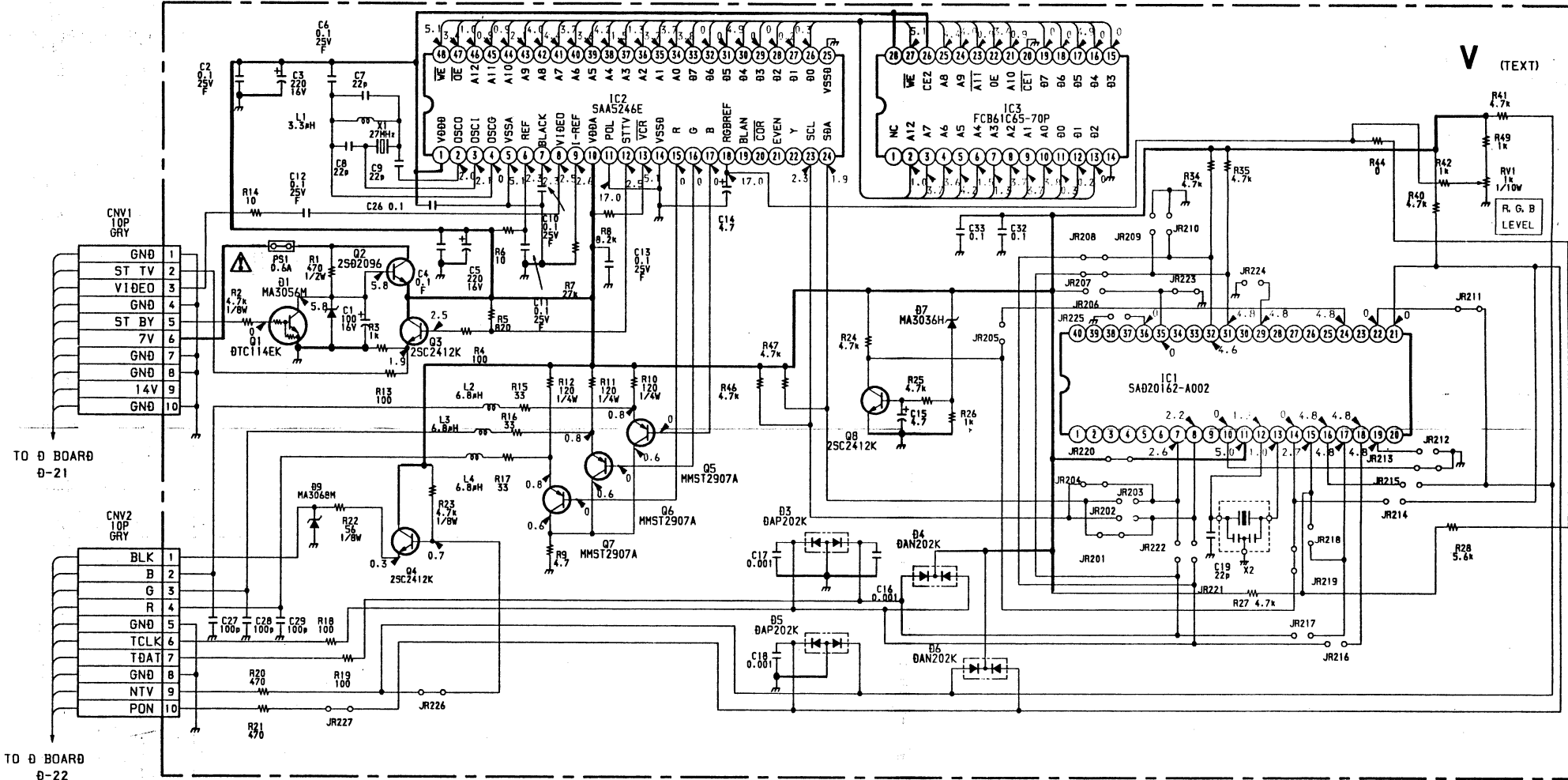
• C BOARD

Q702	JC501	R OUT
Q703	BF871	R OUT
Q704	2SA10910	ACO MEASURING
Q705	JC501	G DRIVE
Q706	BF871	G OUT
Q707	2SA10910	ACO MEASURING
Q708	JC501	B DRIVE
Q709	BF871	B OUT
Q710	2SA10910	ACO MEASURING
D701	MTZJ9.1C	PROTECT
D702	ISS133	PROTECT
D703	ISS133	PROTECT
D704	ISS133	PROTECT
D705	ISS133	PROTECT
D706	ISS133	PROTECT
D707	ISS133	PROTECT
D708	ISS133	PROTECT
D709	ISS133	PROTECT
D710	ISS133	PROTECT
D711	RGP10G	HEATING VOLTAGE REC
D713	ISS133	PROTECT

• WAVEFORMS C BOARD



• C BOARD  
\* HAR  
KV-C  
C-71  
R737



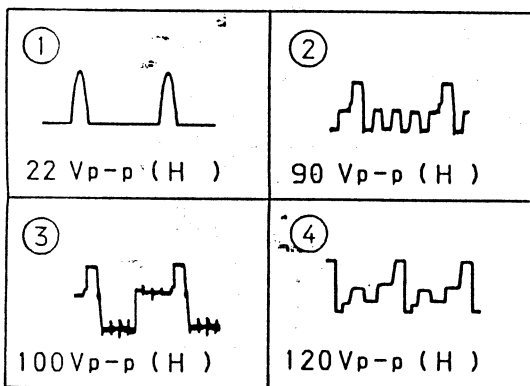
• V BOARD

IC1	S0A20162-A002	MICRO-CONT
IC2	SAAS246E	IVT
IC3	FCB61C65-70P	STATIC-RAM
Q1	0TC114EK	STAND BY
Q2	2S02096	SV REG
Q3	2SC2412K	SYNC BUFFER
Q4	2SC2712K	BLK OUT
Q5	MMST2907A	B OUT
Q6	MMST2907A	G OUT
Q7	MMST2907A	R OUT
Q8	2SC2412K	PON SW
Q1	MA3056M	SV REG
Q3	0AP202K	PROTECT
Q4	0AN202K	PROTECT
Q5	0AP202K	PROTECT
Q6	0AN202K	PROTECT
Q7	MA3036H	PROTECT
Q9	MA3068M	PROTECT

## • C BOARD

Q702	JC501	R DRIVE
Q703	BF871	R OUT
Q704	2SA10910	ACO MEASURING
Q705	JC501	G DRIVE
Q706	BF871	G OUT
Q707	2SA10910	ACO MEASURING
Q708	JC501	B DRIVE
Q709	BF871	B OUT
Q710	2SA10910	ACO MEASURING
Ø701	MTZJ9.1C	PROTECT
Ø702	ISS133	PROTECT
Ø703	ISS133	PROTECT
Ø704	ISS133	PROTECT
Ø705	ISS133	PROTECT
Ø706	ISS133	PROTECT
Ø707	ISS133	PROTECT
Ø708	ISS133	PROTECT
Ø709	ISS133	PROTECT
Ø710	ISS133	PROTECT
Ø711	RGP10G	HEATING VOLTAGE REC
Ø713	ISS133	PROTECT

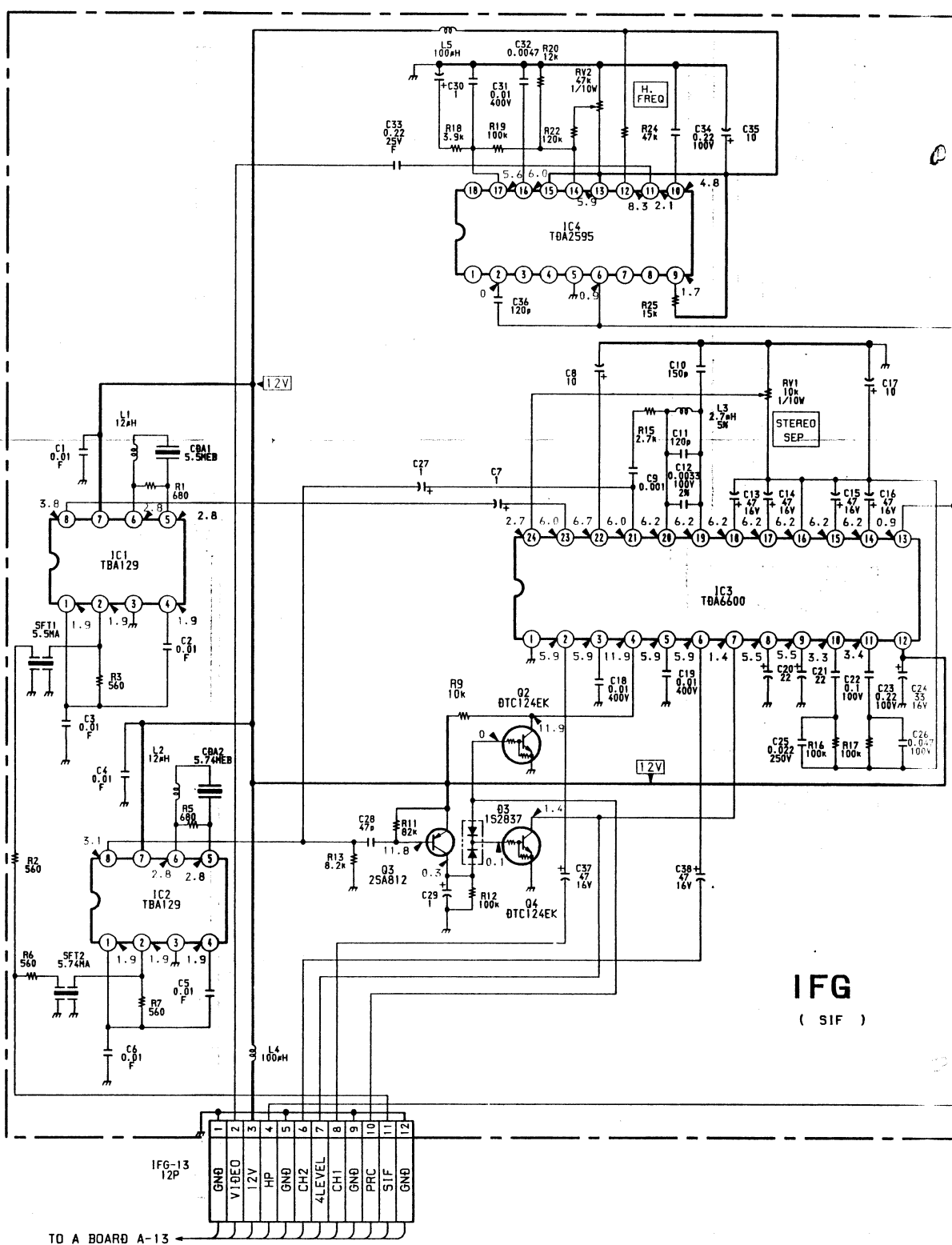
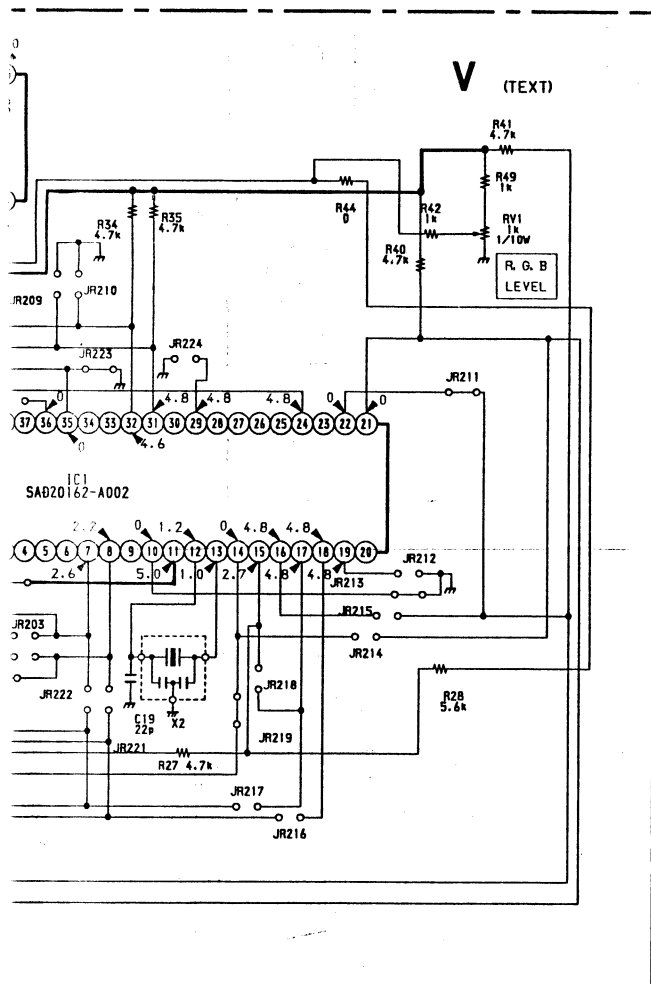
## • WAVEFORMS \* C BOARD



## • C BOARD

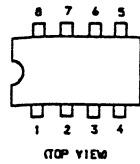
\* MARK

KV-C2551Ø	KV-C2951Ø
C-71 2P	C-71 3P
R737 820k	R737 470k

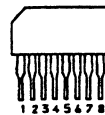




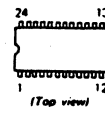
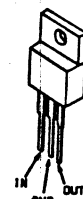
## 5-4. SEMICONDUCTORS

BA4558  
RC4558P  
SDA2546  
TBA129  
TEA2014A  
TEA2031A

CX20061



TDA6600-2

TEA7605  
TYA7812CT  
PC24M05HF

2SA1091-O



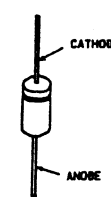
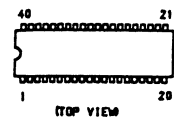
CTU-12S



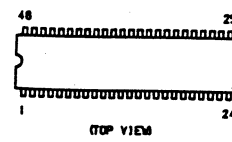
ERD29-08J



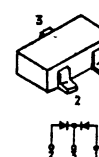
RGP02-17

FCB61C65-70P  
SDA20560-A006

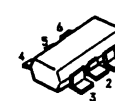
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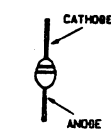
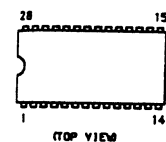
BF871

2SA1220A-P  
2SC2688-LKDAN202K  
DAN212K  
MA152WK

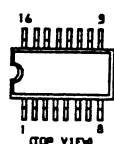
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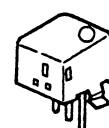
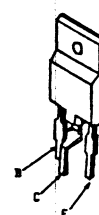
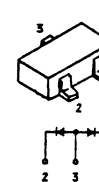
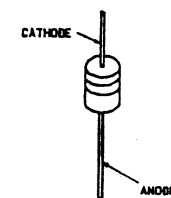
U05G

CXA1114P  
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TDA4580-V6  
TDA6200  
TEA2028B

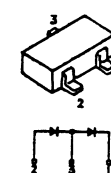
HCF4052BM



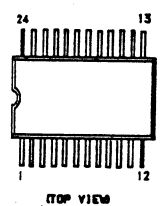
SBX1610-11

BU508AS1H  
2SD1548-LB2SB734-34  
2SD774-34DAP202K  
EGP20GMTZJ-13B  
MTZJ-15A  
MTZJ-3.9B  
MTZJ-33A  
MTZJ-36D  
MTZJ-6.2B  
MTZN-10C  
RD5.6ESB2  
RD6.8ESB2  
RD9.1ESB3  
UZ-4.7BSC  
1SS119

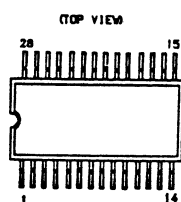
1SS226



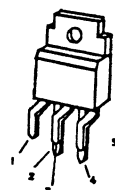
CXD1175AM



MB40968PF



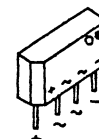
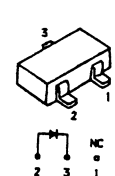
TDA2050



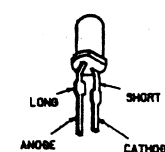
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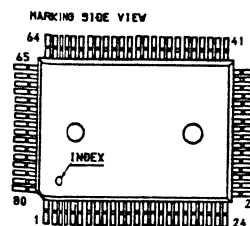
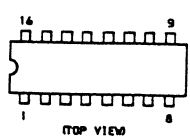
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RD11M-B2  
RD3.6M-B2  
RD5.6M-B2  
RD6.8M-B2

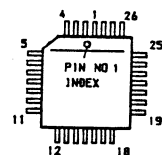
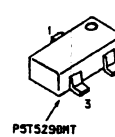
LD-201VR



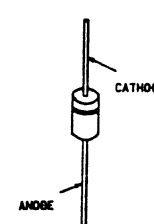
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PCF8574  
TC4051BPHB  
TDA4660T  
TDA8442-N3  
TEA2260

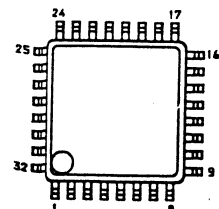
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DTC114EK  
DTC124EK  
DTC144EK  
2SA1162G  
2SB1295-UL6  
2SC2412K-R

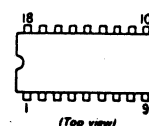
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ERC06-15S  
RU-3AM

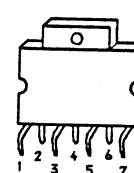
CXK-1202Q



TDA2595/V6



TDA8170



DTC144ES



2SD2096-EF



SECTION 6  
EXPLODED VIEWS

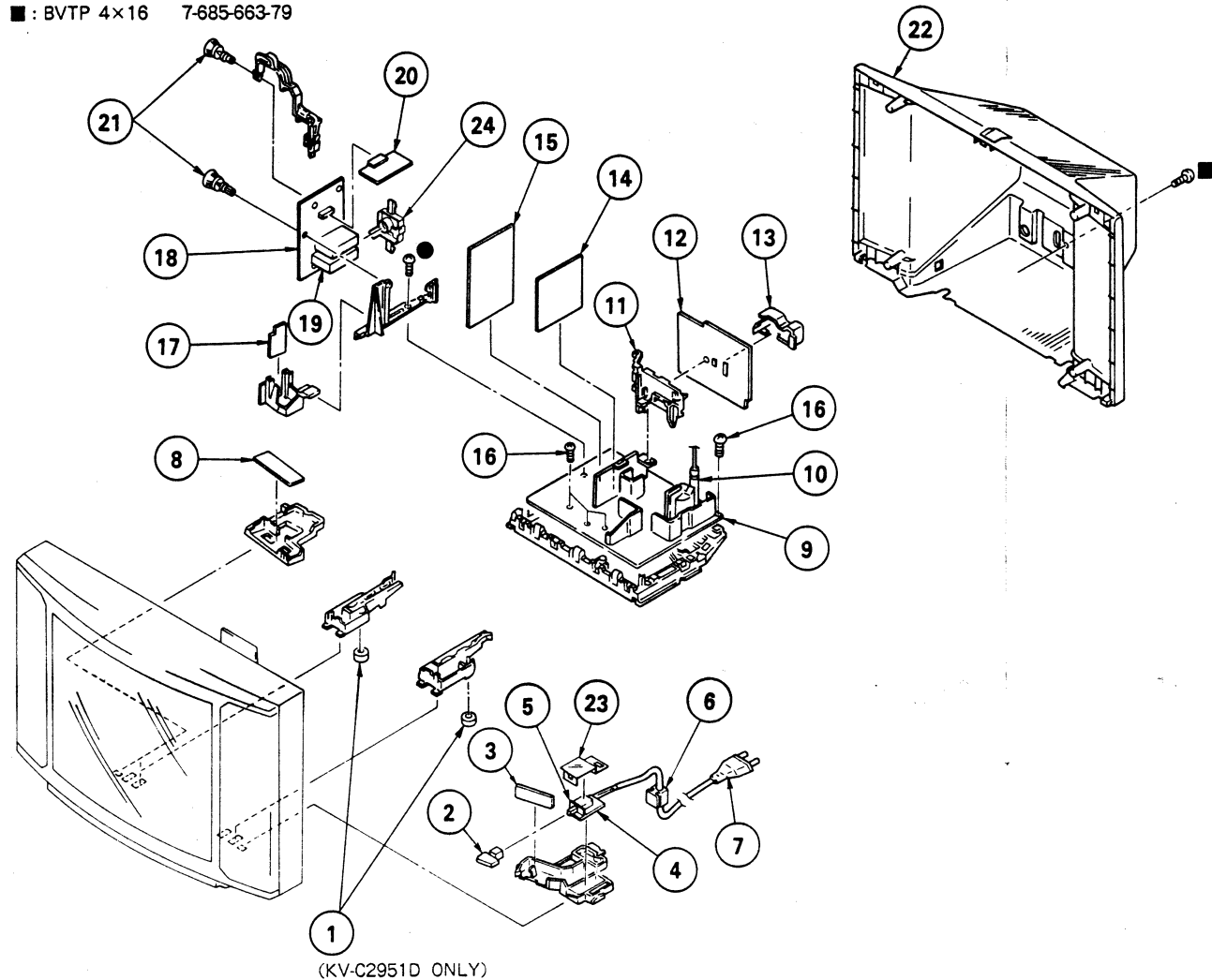
## NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

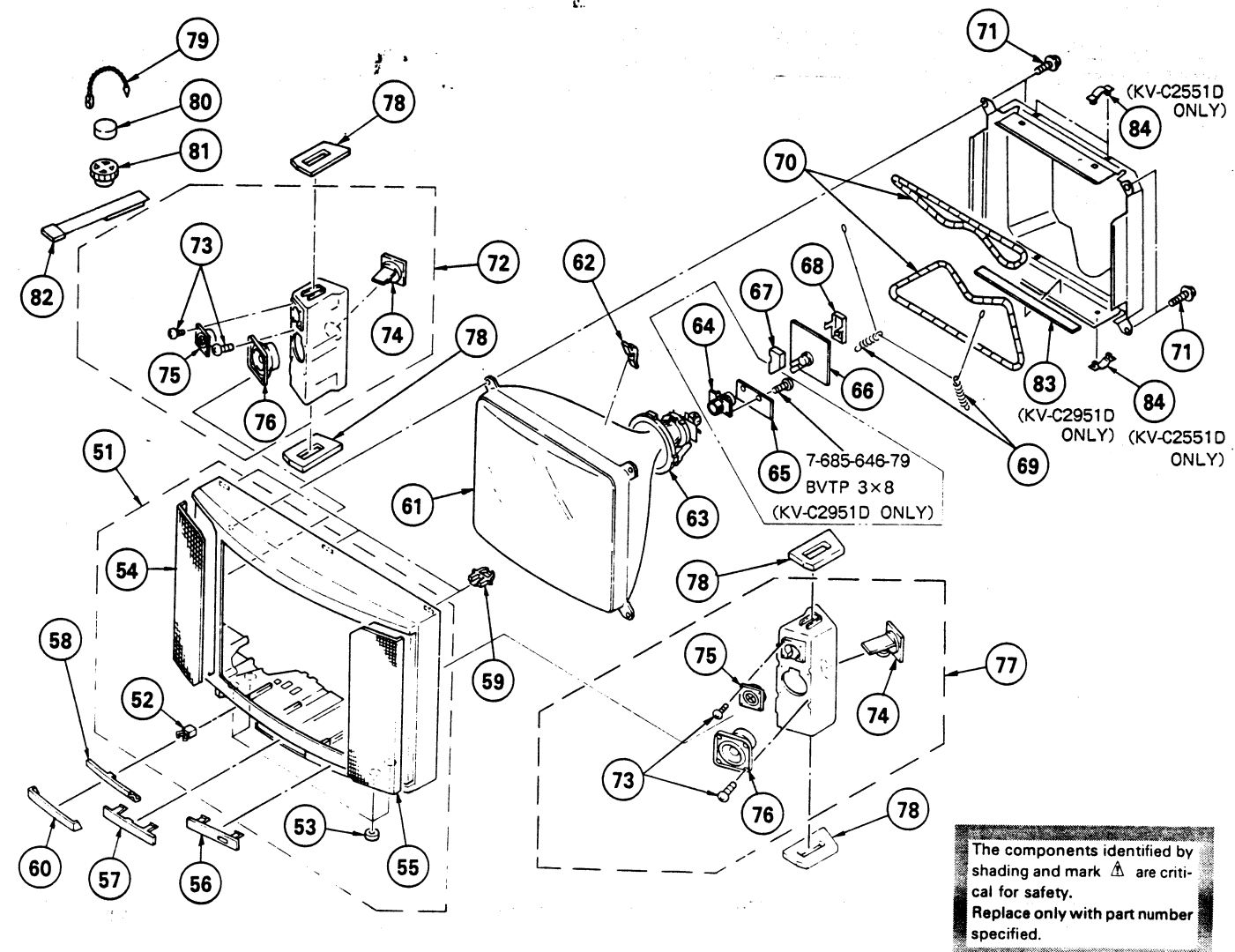
## 6-1. CHASSIS

- : BVTP 3×12 7-685-648-79
- : BVTP 4×16 7-685-663-79



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	4-200-630-01	CUSHION, FOOT (KV-C2951D ONLY)		14	A-1645-013-A	V BOARD, COMPLETE	
2	4-394-305-01	BUTTON, POWER		15	A-1621-013-A	B1 BOARD, COMPLETE (KV-C2551D ONLY)	
3	*1-638-392-11	H2 BOARD		16	A-1621-015-A	B1 BOARD, COMPLETE (KV-C2951D ONLY)	
4	*1-638-390-11	F BOARD		17	4-364-802-00	SCREW (3.5X13)	
5	Δ 1-571-433-12	SWITCH, PUSH (AC POWER)		18	*1-638-393-11	J2 BOARD	
6	Δ 4-389-201-02	HOLDER, AC CORD		19	A-1632-022-A	A BOARD, COMPLETE	
7	Δ 1-590-501-11	CORD, POWER (WITH NOISE FILTER)		20	Δ 1-465-301-11	TUNER, ET (UV-816(PLL))	
8	*1-638-391-11	H1 BOARD		21	A-1654-004-A	IFG BOARD, COMPLETE	
9	A-1642-031-A	D BOARD, COMPLETE (KV-C2551D ONLY)		22	4-386-618-01	RIVET, T TYPE	
10	A-1642-032-A	D BOARD, COMPLETE (KV-C2951D ONLY)		23	4-200-224-11	COVER, REAR (GREY) (KV-C2551D ONLY)	
11	Δ 1-439-416-51	TRANSFORMER ASSY, FLYBACK (UX-1650)		24	4-394-312-14	COVER, REAR (GREY) (KV-C2951D ONLY)	
12	*4-386-624-11	BRACKET, J		25	4-200-224-01	COVER, REAR (BLACK) (KV-C2551D ONLY)	
13	A-1651-018-A	J1 BOARD, COMPLETE (KV-C2551D ONLY)		26	4-394-312-21	COVER, REAR (BLACK) (KV-C2951D ONLY)	
	A-1651-020-A	J1 BOARD, COMPLETE (KV-C2951D ONLY)		27	4-200-274-21	COVER, POWER SWITCH	
	4-200-014-01	BRACKET, TERMINAL		28	*4-386-617-01	HOLDER, TERMINAL	

## 6-2. PICTURE TUBE



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	X-4200-070-1	CABINET ASSY (BLACK) (KV-C2551D ONLY)	52-55	64	Δ 1-452-509-42	NECK ASSY, PICTURE TUBE (NA-308) (KV-C2951D ONLY)	
	X-4200-068-1	CABINET ASSY (BLACK) (KV-C2951D ONLY)	52-55	65	*1-634-193-11	VM BOARD (KV-C2951D ONLY)	
	X-4200-070-2	CABINET ASSY (GREY) (KV-C2551D ONLY)	52-55	66	*A-1638-011-A	C BOARD, COMPLETE (KV-C2551D ONLY)	
	X-4200-068-2	CABINET ASSY (GREY) (KV-C2951D ONLY)	52-55	67	*A-1638-013-A	C BOARD, COMPLETE (KV-C2951D ONLY)	
52	4-392-036-01	CATCHER, PUSH		68	*4-379-167-01	COVER (MAIN), CV	
53	4-809-913-99	FOOT, F		69	*4-379-160-01	COVER (REAR LID), CV	
54	X-4200-069-1	PLATE ASSY (L) (BLACK) (KV-C2551D ONLY)		70	4-303-774-99	SPRING (KV-C2551D ONLY)	
	X-4200-067-1	PLATE ASSY (L) (BLACK) (KV-C2951D ONLY)		71	4-369-318-00	SPRING, TENSION (KV-C2951D ONLY)	
	X-4200-069-2	PLATE ASSY (L) (GREY) (KV-C2551D ONLY)		72	Δ 1-426-372-11	COIL, DEMAGNETIZATION (KV-C2551D ONLY)	
	X-4200-067-2	PLATE ASSY (L) (GREY) (KV-C2951D ONLY)		73	Δ 1-426-398-11	COIL, DEMAGNETIZATION (KV-C2951D ONLY)	
55	X-4200-075-1	PLATE ASSY (R) (BLACK) (KV-C2551D ONLY)		74	4-373-263-11	SCREW (M), PT	
	X-4200-074-1	PLATE ASSY (R) (BLACK) (KV-C2951D ONLY)		75	*A-1678-020-A	BOX ASSY (LEFT), SPEAKER	73-76
	X-4200-075-2	PLATE ASSY (R) (GREY) (KV-C2551D ONLY)		76	4-364-802-00	SCREW (3.5X13)	
	X-4200-074-2	PLATE ASSY (R) (GREY) (KV-C2951D ONLY)		77	1-236-510-11	NETWORK, DIVIDING	
56	4-394-315-01	WINDOW, ORNAMENTAL		78	1-544-146-11	SPEAKER	
57	4-200-222-01	COVER, FRONT (KV-C2551D ONLY)		79	1-544-147-11	SPEAKER	
	4-200-266-01	COVER, FRONT (KV-C2951D ONLY)		80	*A-1678-019-A	BOX ASSY (RIGHT), SPEAKER	73-76
58	4-394-330-12	DOOR (GREY) (KV-C2551D ONLY)		81	4-300-217-01	CUSHION, BOX (KV-C2551D ONLY)	
	4-200-483-12	DOOR (GREY) (KV-C2951D ONLY)		82	*4-394-306-01	CUSHION, BOX (KV-C2951D ONLY)	
59	4-394-330-21	DOOR (BLACK)		83	4-308-870-00	CLIP, LEAD WIRE	
60	4-382-745-01	HOLDER, RC		84	1-452-032-00	MAGNET, DISK; 10MM $\phi$	
61	Δ 8-733-224-05	PICTURE TUBE (A59JWC60X) (KV-C2551D ONLY)			1-452-094-00	MAGNET, ROTATABLE DISK; 15MM $\phi$	
	Δ 8-733-823-05	PICTURE TUBE (A68JYK60X) (KV-C2951D ONLY)			X-4306-312-0	PERMALLOY ASSY, CONVERGENCE	
62	3-704-495-01	SPACER, DY			3-651-853-01	CUSHION (KV-C2951D ONLY)	
63	Δ 1-451-311-21	DEFLECTION YOKE (Y25FXA) (KV-C2551D ONLY)			*4-385-916-01	HOLDER (D) (KV-C2551D ONLY)	
	Δ 1-451-313-21	DEFLECTION YOKE (Y29FXA) (KV-C2951D ONLY)					

# SECTION 7

## ELECTRICAL PARTS LIST

B

## NOTE:

The components identified by shading and mark "A" are critical for safety.

Replace only with part number specified.

• Items marked "A" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

## RESISTORS

• All resistors are in ohms  
• F : nonflammable

When indicating parts by reference number, please include the board name.

## CAPACITORS

## COILS

• MF :  $\mu$ F, PF :  $\mu$ P• MMH : MH, OH :  $\Omega$ 

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
	A-1621-013-A	31 BOARD, COMPLETE (KV-C2551D ONLY)		C340	1-126-103-11	ELECT	470MF 20% 16V
		*****		C341	1-164-232-11	CERAMIC CHIP	0.01MF 50V
	A-1621-015-A	31 BOARD, COMPLETE (KV-C2951D ONLY)		C342	1-124-903-11	ELECT	1MF 20% 50V
		*****					
		<CONNECTOR>		C343	1-163-038-00	CERAMIC CHIP	0.1MF 25V
B31	*1-565-393-11	CONNECTOR, BOARD TO BOARD		C344	1-121-803-11	ELECT	1MF 20% 50V
B32	*1-565-393-11	CONNECTOR, BOARD TO BOARD		C345	1-137-094-11	FILM	0.047MF 10% 100V
B33	*1-565-393-11	CONNECTOR, BOARD TO BOARD		C346	1-137-033-11	FILM	0.33MF 10% 100V
S72	*1-565-331-51	PIN, CONNECTOR 6P		C347	1-137-098-11	FILM	0.1MF 10% 100V
S73	*1-565-378-51	PIN, CONNECTOR 3P					
		<CAPACITOR>		C348	1-137-102-11	FILM	0.022MF 10% 250V
C301	1-137-031-11	FILM	0.22MF 10% 100V	C349	1-137-102-11	FILM	0.022MF 10% 250V
C302	1-137-031-11	FILM	0.22MF 10% 100V	C350	1-124-902-00	ELECT	0.47MF 20% 50V
C303	1-124-122-11	ELECT	100MF 20% 50V	C351	1-137-102-11	FILM	0.022MF 10% 250V
C304	1-137-031-11	FILM	0.22MF 10% 100V	C352	1-164-232-11	CERAMIC CHIP	0.01MF 50V
C305	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V				
C306	1-124-902-00	ELECT	0.47MF 20% 50V	C353	1-126-101-11	ELECT	100MF 20% 16V
C307	1-124-902-00	ELECT	0.47MF 20% 50V	C354	1-164-232-11	CERAMIC CHIP	0.01MF 50V
C308	1-124-902-00	ELECT	0.47MF 20% 50V	C356	1-126-101-11	ELECT	100MF 20% 16V
C309	1-124-902-00	ELECT	0.47MF 20% 50V	C357	1-164-232-11	CERAMIC CHIP	0.01MF 50V
C310	1-137-098-11	FILM	0.1MF 10% 100V	C358	1-164-232-11	CERAMIC CHIP	0.01MF 50V
C311	1-137-098-11	FILM	0.1MF 10% 100V	C360	1-164-232-11	CERAMIC CHIP	0.01MF 50V
C312	1-124-902-00	ELECT	0.47MF 20% 50V	C361	1-164-232-11	CERAMIC CHIP	0.01MF 50V
C313	1-124-902-00	ELECT	0.47MF 20% 50V	C363	1-163-033-00	CERAMIC CHIP	0.33MF 50V
C314	1-124-902-00	ELECT	0.47MF 20% 50V	C371	1-164-232-11	CERAMIC CHIP	0.01MF 50V
C315	1-124-903-11	ELECT	1MF 20% 50V	C372	1-124-477-11	ELECT	47MF 20% 16V
C316	1-124-927-11	ELECT	4.7MF 20% 50V	C373	1-124-477-11	ELECT	47MF 20% 16V
C317	1-164-232-11	CERAMIC CHIP	0.01MF 50V	C374	1-163-090-00	CERAMIC CHIP	7PF 0.25PF 50V
C318	1-124-927-11	ELECT	4.7MF 20% 50V	C375	1-163-090-00	CERAMIC CHIP	7PF 0.25PF 50V
C319	1-124-927-11	ELECT	4.7MF 20% 50V	C376	1-124-034-51	ELECT	33MF 20% 16V
C320	1-124-910-11	ELECT	47MF 20% 50V	C377	1-124-119-00	ELECT	330MF 20% 16V
C321	1-137-027-11	FILM	0.82MF 10% 63V	C378	1-124-034-51	ELECT	33MF 20% 16V
C322	1-163-077-00	CERAMIC CHIP	0.1MF 50V	C379	1-163-090-00	CERAMIC CHIP	7PF 0.25PF 50V
C323	1-164-232-11	CERAMIC CHIP	0.01MF 50V	C380	1-163-090-00	CERAMIC CHIP	7PF 0.25PF 50V
C324	1-164-232-11	CERAMIC CHIP	0.01MF 50V	C381	1-163-105-00	CERAMIC CHIP	33PF 5% 50V
C325	1-163-038-00	CERAMIC CHIP	0.1MF 25V	C382	1-163-121-00	CERAMIC CHIP	150PF 5% 50V
C326	1-124-910-11	ELECT	47MF 20% 50V	C383	1-163-197-00	CERAMIC CHIP	470PF 5% 50V
C327	1-124-910-11	ELECT	47MF 20% 50V	C384	1-163-103-00	CERAMIC CHIP	27PF 5% 50V
C328	1-163-038-00	CERAMIC CHIP	0.1MF 25V	C385	1-163-093-00	CERAMIC CHIP	10PF 5% 50V
C329	1-163-123-00	CERAMIC CHIP	180PF 5% 50V	C386	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C330	1-163-125-00	CERAMIC CHIP	220PF 5% 50V	C387	1-163-113-00	CERAMIC CHIP	68PF 5% 50V
C331	1-137-098-11	FILM	0.1MF 10% 100V	C388	1-164-232-11	CERAMIC CHIP	0.01MF 50V
C332	1-137-098-11	FILM	0.1MF 10% 100V	C389	1-163-097-00	CERAMIC CHIP	15PF 5% 50V
C333	1-163-103-00	CERAMIC CHIP	27PF 5% 50V	C390	1-124-907-11	ELECT	10MF 20% 50V
C335	1-163-119-00	CERAMIC CHIP	120PF 5% 50V	C391	1-124-407-11	ELECT	10MF 20% 50V
C337	1-163-103-00	CERAMIC CHIP	27PF 5% 50V	C392	1-124-907-11	ELECT	10MF 20% 50V
C338	1-137-102-11	FILM	0.022MF 10% 250V	C393	1-126-101-11	ELECT	100MF 20% 16V
C339	1-164-232-11	CERAMIC CHIP	0.01MF 50V	C394	1-126-101-11	ELECT	100MF 20% 16V
				C395	1-126-101-11	ELECT	100MF 20% 16V
				C396	1-126-101-11	ELECT	100MF 20% 16V
				C397	1-137-028-11	FILM	1MF 10% 63V
				C398	1-124-907-11	ELECT	10MF 20% 50V
				C399	1-163-038-00	CERAMIC CHIP	0.1MF 25V
				C1301	1-163-105-00	CERAMIC CHIP	33PF 5% 50V

31

The components identified by  
shading and mark are criti-  
cal for safety.  
Replace only with part number  
specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C1302	1-163-235-11	CERAMIC CHIP 22PF	5%	50V	<DELAY LINE>		
C1303	1-163-038-00	CERAMIC CHIP 0.1MF		25V	DL301	1-415-613-11	DELAY LINE, Y
C1304	1-124-907-11	ELECT 10MF	20%	50V			
C1305	1-126-101-11	ELECT 100MF	20%	16V			
C1306	1-163-038-00	CERAMIC CHIP 0.1MF		25V			
C1307	1-163-038-00	CERAMIC CHIP 0.1MF		25V	<FILTER>		
C1308	1-163-038-00	CERAMIC CHIP 0.1MF		25V	FL301	1-236-620-11	FILTER, LOW PASS
C1309	1-164-232-11	CERAMIC CHIP 0.01MF		50V	FL302	1-236-620-11	FILTER, LOW PASS
C1310	1-164-232-11	CERAMIC CHIP 0.01MF		50V	FL303	1-236-620-11	FILTER, LOW PASS
C1311	1-163-038-00	CERAMIC CHIP 0.1MF		25V	FL305	1-236-164-11	ENCAPSULATED COMPONENT
C1312	1-163-038-00	CERAMIC CHIP 0.1MF		25V	<IC>		
C1313	1-163-038-00	CERAMIC CHIP 0.1MF		25V	IC301	8-759-517-43	IC TDA4580/V7
C1314	1-163-109-00	CERAMIC CHIP 47PF	5%	50V	IC302	8-759-980-60	IC TDA8442N3
C1315	1-163-038-00	CERAMIC CHIP 0.1MF		25V	IC303	8-759-510-48	IC TDA4660T
C1316	1-163-141-00	CERAMIC CHIP 0.001MF	5%	50V	IC304	8-759-510-47	IC TDA4650WP
C1317	1-163-038-00	CERAMIC CHIP 0.1MF		25V	IC305	8-759-144-84	IC UPC24M05HF
C1318	1-163-038-00	CERAMIC CHIP 0.1MF		25V	IC306	8-759-510-50	IC HCF4052BM
C1319	1-164-232-11	CERAMIC CHIP 0.01MF		50V	IC308	8-752-006-12	IC CX20061
C1320	1-164-232-11	CERAMIC CHIP 0.01MF		50V	IC310	8-752-337-07	IC CXD2011Q
C1321	1-164-232-11	CERAMIC CHIP 0.01MF		50V	IC311	8-759-996-49	IC MB40968PF
C1322	1-164-232-11	CERAMIC CHIP 0.01MF		50V	IC312	8-752-338-45	IC CXK1202Q
C1323	1-164-232-11	CERAMIC CHIP 0.01MF		50V	IC313	8-752-338-45	IC CXK1202Q
C1324	1-163-033-00	CERAMIC CHIP 0.022MF		50V	IC315	8-752-334-55	IC CXD1175AM
C1325	1-163-038-00	CERAMIC CHIP 0.1MF		25V	<COIL>		
C1326	1-164-232-11	CERAMIC CHIP 0.01MF		50V	L301	1-408-405-00	INDUCTOR 4.7UH
C1327	1-163-115-00	CERAMIC CHIP 82PF	5%	50V	L303	1-404-554-11	COIL
C1328	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V	L304	1-408-405-00	INDUCTOR 4.7UH
C1329	1-163-035-00	CERAMIC CHIP 0.047MF		50V	L305	1-408-402-00	INDUCTOR 2.7UH
C1330	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V	L306	1-408-405-00	INDUCTOR 4.7UH
C1331	1-164-187-11	CERAMIC CHIP 390PF	2%	50V	L308	1-404-495-00	COIL
C1333	1-126-101-11	ELECT 100MF	20%	16V	L309	1-408-415-00	INDUCTOR 33UH
<TRIMMER>				L310	1-408-419-00	INDUCTOR 68UH	
CT301	1-141-418-11	CAP, ADJ		L312	1-404-495-00	COIL	
CT302	1-141-418-11	CAP, ADJ		L313	1-404-554-11	COIL	
<DIODE>				L314	1-408-409-00	INDUCTOR 10UH	
D301	8-719-951-22	DIODE 1M10		L320	1-408-405-00	INDUCTOR 4.7UH	
D304	8-719-989-26	DIODE DAN212K		L321	1-408-405-00	INDUCTOR 4.7UH	
D305	8-719-989-26	DIODE DAN212K		L323	1-408-398-00	INDUCTOR 1.2UH	
D307	8-719-106-62	DIODE RD11M-B2		L325	1-408-405-00	INDUCTOR 4.7UH	
D308	8-719-989-26	DIODE DAN212K		L326	1-408-421-00	INDUCTOR 100UH	
D309	8-719-989-26	DIODE DAN212K		L327	1-408-402-00	INDUCTOR 2.7UH	
D310	8-719-106-62	DIODE RD11M-B2		L1301	1-408-425-00	INDUCTOR 220UH	
D311	8-719-106-62	DIODE RD11M-B2		<IC LINK>			
D312	8-719-106-62	DIODE RD11M-B2		PS301A	1-532-605-91	LINK, IC (ICP-N10) 0.4A	
D314	8-719-800-76	DIODE 1SS226		<TRANSISTOR>			
D318	8-719-800-76	DIODE 1SS226		Q301	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D319	8-719-800-76	DIODE 1SS226		Q302	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D320	8-719-800-76	DIODE 1SS226		Q303	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D321	8-719-105-91	DIODE RD5.6M-B2		Q304	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D322	8-719-400-18	DIODE MA152WK		Q305	8-729-901-06	TRANSISTOR DTA144EK	
D330	8-719-989-26	DIODE DAN212K		Q306	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D331	8-719-914-44	DIODE DAP202K		Q307	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
D333	8-719-951-22	DIODE 1M10		Q308	8-729-901-00	TRANSISTOR DTC124EK	
D336	8-719-400-18	DIODE MA152WK		Q310	8-729-901-00	TRANSISTOR DTC124EK	
D340	8-719-800-76	DIODE 1SS226		Q311	8-729-901-00	TRANSISTOR DTC124EK	
D341	8-719-989-26	DIODE DAN212K		Q320	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
				Q321	8-729-216-22	TRANSISTOR 2SA1162-G	
				Q322	8-729-216-22	TRANSISTOR 2SA1162-G	




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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q323	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R309	1-216-025-00	METAL GLAZE 100 5%	1/10W
Q324	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R310	1-216-025-00	METAL GLAZE 100 5%	1/10W
Q327	8-729-216-22	TRANSISTOR 2SA1162-G		R311	1-216-025-00	METAL GLAZE 100 5%	1/10W
Q328	8-729-216-22	TRANSISTOR 2SA1162-G		R312	1-216-019-00	METAL GLAZE 56 5%	1/10W
Q329	8-729-216-22	TRANSISTOR 2SA1162-G					
Q330	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R313	1-216-019-00	METAL GLAZE 56 5%	1/10W
Q331	8-729-216-22	TRANSISTOR 2SA1162-G		R314	1-216-019-00	METAL GLAZE 56 5%	1/10W
Q332	8-729-216-22	TRANSISTOR 2SA1162-G		R316	1-216-081-00	METAL GLAZE 22K 5%	1/10W
Q333	8-729-901-00	TRANSISTOR DTC124EK		R317	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q334	8-729-901-00	TRANSISTOR DTC124EK		R318	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q335	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R319	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q336	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R320	1-216-198-00	METAL GLAZE 1K 5%	1/8W
Q337	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R321	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q338	8-729-216-22	TRANSISTOR 2SA1162-G		R322	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q339	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R323	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
Q340	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R324	1-216-049-00	METAL GLAZE 1K 5%	1/10W
Q341	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R325	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q342	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R326	1-216-009-00	METAL GLAZE 22 5%	1/10W
Q343	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R327	1-216-009-00	METAL GLAZE 22 5%	1/10W
Q344	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R328	1-216-009-00	METAL GLAZE 22 5%	1/10W
Q345	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R329	1-216-031-00	METAL GLAZE 180 5%	1/10W
Q346	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R330	1-216-031-00	METAL GLAZE 180 5%	1/10W
Q347	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R331	1-216-031-00	METAL GLAZE 180 5%	1/10W
Q348	8-729-901-00	TRANSISTOR DTC124EK		R332	1-216-182-00	METAL GLAZE 220 5%	1/8W
Q350	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R333	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q352	8-729-216-22	TRANSISTOR 2SA1162-G		R335	1-216-101-00	METAL GLAZE 150K 5%	1/10W
Q353	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R336	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q354	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R337	1-216-093-00	METAL GLAZE 68K 5%	1/10W
Q355	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R338	1-216-085-00	METAL GLAZE 33K 5%	1/10W
Q356	8-729-216-22	TRANSISTOR 2SA1162-G		R339	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
Q357	8-729-216-22	TRANSISTOR 2SA1162-G		R340	1-216-103-00	METAL GLAZE 180K 5%	1/10W
Q358	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R341	1-216-115-00	METAL GLAZE 560K 5%	1/10W
Q359	8-729-216-22	TRANSISTOR 2SA1162-G		R342	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
Q360	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R343	1-216-043-00	METAL GLAZE 560 5%	1/10W
Q361	8-729-120-28	TRANSISTOR 2SC1623-L5L6					(KV-C2551D ONLY)
Q362	8-729-120-28	TRANSISTOR 2SC1623-L5L6			1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
Q363	8-729-120-28	TRANSISTOR 2SC1623-L5L6					(KV-C2951D ONLY)
Q364	8-729-216-22	TRANSISTOR 2SA1162-G		R344	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q365	8-729-216-22	TRANSISTOR 2SA1162-G		R345	1-216-097-00	METAL GLAZE 100K 5%	1/10W
Q366	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R346	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q367	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R347	1-216-121-00	METAL GLAZE 1M 5%	1/10W
Q368	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R348	1-216-001-00	METAL GLAZE 10 5%	1/10W
Q369	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R349	1-216-001-00	METAL GLAZE 10 5%	1/10W
Q370	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R350	1-216-184-00	METAL GLAZE 270 5%	1/8W
Q371	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R351	1-216-184-00	METAL GLAZE 270 5%	1/8W
Q372	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R352	1-216-070-00	METAL GLAZE 7.5K 5%	1/10W
Q373	8-729-901-00	TRANSISTOR DTC124EK		R353	1-216-073-00	METAL GLAZE 10K 5%	1/10W
Q1301	8-729-901-00	TRANSISTOR DTC124EK		R354	1-216-037-00	METAL GLAZE 330 5%	1/10W
Q1302	8-729-120-28	TRANSISTOR 2SC1623-L5L6		R355	1-216-033-00	METAL GLAZE 220 5%	1/10W
Q1303	8-729-901-00	TRANSISTOR DTC124EK		R357	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
<RESISTOR>				R358	1-216-037-00	METAL GLAZE 330 5%	1/10W
JR302	1-216-295-00	METAL GLAZE 0 5%	1/10W	R359	1-216-041-00	METAL GLAZE 470 5%	1/10W
JR304	1-216-296-00	METAL GLAZE 0 5%	1/8W	R361	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
JR305	1-216-295-00	METAL GLAZE 0 5%	1/10W	R362	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
JR391	1-216-295-00	METAL GLAZE 0 5%	1/10W	R363	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
R301	1-216-033-00	METAL GLAZE 220 5%	1/10W	R364	1-216-033-00	METAL GLAZE 220 5%	1/10W
R302	1-216-033-00	METAL GLAZE 220 5%	1/10W	R365	1-216-035-00	METAL GLAZE 270 5%	1/10W
R303	1-216-033-00	METAL GLAZE 220 5%	1/10W	R366	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
R304	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R367	1-216-069-00	METAL GLAZE 6.8K 5%	1/10W
R305	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R368	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R306	1-216-035-00	METAL GLAZE 270 5%	1/10W	R369	1-216-071-00	METAL GLAZE 8.2K 5%	1/10W
R307	1-216-097-00	METAL GLAZE 100K 5%	1/10W	R370	1-216-097-00	METAL GLAZE 100K 5%	1/10W
				R371	1-216-049-00	METAL GLAZE 1K 5%	1/10W
				R372	1-216-033-00	METAL GLAZE 220 5%	1/10W
				R373	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W



&lt;VARIABLE RESISTOR&gt;

RV301 1-238-012-11 RES. ADJ. CARBON 1K

The components identified by shading and mark  are critical for safety.  
Replace only with part number specified.

KV-C2551D/C2951I  
RM-81

B1 F A

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
<CRYSTAL>				<COIL>			
X301	1-567-307-11	OSCILLATOR, CRYSTAL		L100	1-410-683-31	INDUCTOR 560UH	
X302	1-567-131-00	OSCILLATOR, CRYSTAL		L101	1-408-225-00	INDUCTOR 3.3UH	
*****				L102	1-408-413-00	INDUCTOR 22UH	
*1-638-390-11 F BOARD				L107	1-408-397-00	INDUCTOR 1UH	
*****				<TRANSISTOR>			
*4-341-752-01 EYELET				Q113	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
<CONNECTOR>				Q114	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
F61	*1-580-690-11	PIN, CONNECTOR (PC BOARD) 4P		Q115	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
F62	*1-580-690-11	PIN, CONNECTOR (PC BOARD) 4P		Q116	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
<FUSE>				Q125	8-729-900-89	TRANSISTOR DTC144ES	
F1601A	1-532-504-31	FUSE 4A/250V		Q126	8-729-901-06	TRANSISTOR DTA144EX	
	1-533-230-11	HOLDER, FUSE: F1601		Q181	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
<SWITCH>				<RESISTOR>			
S1701A	1-571-433-12	SWITCH, PUSH (AC POWER)		JR230	1-216-295-00	METAL GLAZE 0 5% 1/10W	
*****				JR252	1-216-296-00	METAL GLAZE 0 5% 1/8W	
A-1632-022-A A BOARD, COMPLETE				JR253	1-216-296-00	METAL GLAZE 0 5% 1/8W	
*****				JR255	1-216-296-00	METAL GLAZE 0 5% 1/8W	
<CONNECTOR>				JR256	1-216-296-00	METAL GLAZE 0 5% 1/8W	
A11	*1-565-393-11	CONNECTOR, BOARD TO BOARD		JR257	1-216-296-00	METAL GLAZE 0 5% 1/8W	
A12	*1-565-393-11	CONNECTOR, BOARD TO BOARD		JR258	1-216-296-00	METAL GLAZE 0 5% 1/8W	
A13	*1-565-503-11	CONNECTOR, BOARD TO BOARD 12P		R101	1-216-025-00	METAL GLAZE 100 5% 1/10W	
A16	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)		R105	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
A17	*1-564-886-11	PLUG, CONNECTOR 9P		R107	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
A19	*1-564-881-11	PLUG, CONNECTOR 4P		R108	1-216-079-00	METAL GLAZE 18K 5% 1/10W	
<CAPACITOR>				R110	1-249-429-11	CARBON 10K 5% 1/4W	
C101	1-126-233-11	ELECT 22MF 20% 50V		R111	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
C102	1-126-103-11	ELECT 470MF 20% 16V		R116	1-216-023-00	METAL GLAZE 82 5% 1/10W	
C104	1-124-910-11	ELECT 47MF 20% 50V		R118	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
C106	1-126-233-11	ELECT 22MF 20% 50V		R128	1-216-027-00	METAL GLAZE 120 5% 1/10W	
C108	1-136-165-00	FILM 0.1MF 5% 50V		R129	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
C109	1-163-133-00	CERAMIC CHIP 470PF 5% 50V		R130	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W	
C111	1-124-925-11	ELECT 2.2MF 20% 50V		R157	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
C115	1-124-925-11	ELECT 2.2MF 20% 50V		R158	1-249-409-11	CARBON 220 5% 1/4W	
C127	1-124-122-11	ELECT 100MF 20% 50V		R159	1-249-409-11	CARBON 220 5% 1/4W	
C128	1-124-910-11	ELECT 47MF 20% 50V		R161	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
C129	1-124-910-11	ELECT 47MF 20% 50V		R162	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
C138	1-136-165-00	FILM 0.1MF 5% 50V		R163	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
C171	1-163-005-11	CERAMIC CHIP 470PF 10% 50V		R164	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
C172	1-163-005-11	CERAMIC CHIP 470PF 10% 50V		R165	1-216-075-00	METAL GLAZE 12K 5% 1/10W	
C177	1-102-074-00	CERAMIC 0.001MF 10% 50V		R167	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
C181	1-101-004-00	CERAMIC 0.01MF 50V		R168	1-216-089-00	METAL GLAZE 47K 5% 1/10W	
<IC>				R169	1-216-059-00	METAL GLAZE 2.7K 5% 1/10W	
IC103	8-759-979-62	IC PCF8574		R181	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
<TUNER>				R182	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
*****				R193	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
<IF BLOCK>				R194	1-216-017-00	METAL GLAZE 47 5% 1/10W	
*****				R195	1-216-017-00	METAL GLAZE 47 5% 1/10W	
*****				R196	1-216-113-00	METAL GLAZE 470K 5% 1/10W	
*****				<IF BLOCK>			
*****				VU101A	1-465-301-11	TUNER, ET (UV-816(PLL))	
*****				VIF101	1-466-154-11	IF BLOCK (IFG-389S)	
*****				*****			

**C** **D**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
*A-1638-011-A		C BOARD, COMPLETE (KV-C2551D ONLY)		<TRANSISTOR>			
*A-1638-013-A		C BOARD, COMPLETE (KV-C2951D ONLY)		Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
*4-379-160-01		COVER (REAR LID), CV		Q703	8-729-906-70	TRANSISTOR BF871	
*4-379-167-01		COVER (MAIN), CV		Q704	8-729-200-17	TRANSISTOR 2SA1091-0	
				Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE	
				Q706	8-729-906-70	TRANSISTOR BF871	
<CONNECTOR>				Q707	8-729-200-17	TRANSISTOR 2SA1091-0	
C71	*1-506-371-00	PIN, CONNECTOR 2P		Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C72	*1-568-881-51	PIN, CONNECTOR 6P		Q709	8-729-906-70	TRANSISTOR BF871	
C81	*1-568-878-51	PIN, CONNECTOR 3P		Q710	8-729-200-17	TRANSISTOR 2SA1091-0	
C82	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		<RESISTOR>			
<CAPACITOR>				R704	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
C703	1-102-822-00	CERAMIC 390PF	5% 50V (KV-C2551D ONLY)	R705	1-202-824-00	SOLID 3.3K 10% 1/2W	
	1-102-820-00	CERAMIC 330PF	5% 50V (KV-C2951D ONLY)	R706	1-249-409-11	CARBON 220 5% 1/4W	
C704	1-102-116-00	CERAMIC 680PF	10% 50V	R707	1-249-412-11	CARBON 390 5% 1/4W	
C705	1-102-820-00	CERAMIC 330PF	5% 50V (KV-C2551D ONLY)	R708	1-249-401-11	CARBON 47 5% 1/4W	
	1-102-980-00	CERAMIC 270PF	5% 50V (KV-C2951D ONLY)	R709	1-202-844-00	SOLID 330K 10% 1/2W	
C706	1-102-116-00	CERAMIC 680PF	10% 50V	R710	1-215-465-00	METAL 68K 1% 1/4W	
C707	1-162-116-00	CERAMIC 680PF	10% 2KV	R711	1-249-426-11	CARBON 5.6K 5% 1/4W	
C708	1-162-114-00	CERAMIC 0.0047MF	2KV	R712	1-249-417-11	CARBON 1K 5% 1/4W	
C709	1-102-116-00	CERAMIC 680PF	10% 50V	R713	1-215-471-00	METAL 120K 1% 1/4W	
C710	1-123-947-00	ELECT 10MF	20% 250V	R714	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
C711	1-101-880-00	CERAMIC 47PF	5% 50V	R715	1-202-824-00	SOLID 3.3K 10% 1/2W	
C712	1-102-820-00	CERAMIC 330PF	5% 50V	R716	1-249-409-11	CARBON 220 5% 1/4W	
C714	1-124-360-00	ELECT 1000MF	20% 16V	R717	1-249-415-11	CARBON 680 5% 1/4W	
C716	1-162-622-11	CERAMIC 330PF	10% 400V	R718	1-202-814-11	SOLID 33K 10% 1/2W	
C717	1-102-114-00	CERAMIC 470PF	10% 50V	R719	1-249-401-11	CARBON 47 5% 1/4W	
C718	1-102-114-00	CERAMIC 470PF	10% 50V	R720	1-249-423-11	CARBON 3.3K 5% 1/4W	
C719	1-102-114-00	CERAMIC 470PF	10% 50V	R721	1-202-842-11	SOLID 220K 10% 1/2W	
<DIODE>				R722	1-202-848-00	SOLID 680K 10% 1/2W	
D701	8-719-110-14	DIODE RD9.1ES-B3		R723	1-249-417-11	CARBON 1K 5% 1/4W	
D702	8-719-911-19	DIODE 1SS119		R724	1-202-846-00	SOLID 470K 10% 1/2W	
D703	8-719-911-19	DIODE 1SS119		R725	1-202-838-00	SOLID 100K 10% 1/2W	
D704	8-719-911-19	DIODE 1SS119		R726	1-202-824-00	SOLID 3.3K 10% 1/2W	
D705	8-719-911-19	DIODE 1SS119		R727	1-249-409-11	CARBON 220 5% 1/4W	
D706	8-719-911-19	DIODE 1SS119		R728	1-216-347-11	METAL OXIDE 0.68 5% 1W F	
D707	8-719-911-19	DIODE 1SS119		R729	1-249-416-11	CARBON 820 5% 1/4W	
D708	8-719-911-19	DIODE 1SS119		R730	1-249-401-11	CARBON 47 5% 1/4W	
D709	8-719-911-19	DIODE 1SS119		R731	1-249-423-11	CARBON 3.3K 5% 1/4W	
D710	8-719-911-19	DIODE 1SS119		R732	1-249-415-11	CARBON 680 5% 1/4W	
D711	8-719-300-33	DIODE RU-3AM		R733	1-249-415-11	CARBON 680 5% 1/4W	
D713	8-719-911-19	DIODE 1SS119		R734	1-249-405-11	CARBON 100 5% 1/4W	
<JACK>				R735	1-215-493-00	METAL 1M 1% 1/4W	
J701	1-526-990-11	SOCKET, PICTURE TUBE		R736	1-216-486-00	METAL OXIDE 8.2K 5% 3W F	
<COIL>				R737	1-215-491-00	METAL 820K 1% 1/4W (KV-C2551D ONLY)	
L704	1-410-878-11	INDUCTOR 33UH			1-215-485-00	METAL 470K 1% 1/4W (KV-C2951D ONLY)	
<VARIABLE RESISTOR>				R739	1-249-417-11	CARBON 1K 5% 1/4W	
RV701	1-230-641-11	RES. ADJ, METAL GLAZE 2.2M		<VARIABLE RESISTOR>			
RV702	1-230-619-11	RES. ADJ, METAL GLAZE 110M		RV701	1-230-641-11	RES. ADJ, METAL GLAZE 2.2M	
RV703	1-237-749-11	RES. ADJ, CARBON 2200		RV702	1-230-619-11	RES. ADJ, METAL GLAZE 110M	
RV704	1-237-749-11	RES. ADJ, CARBON 2200		RV703	1-237-749-11	RES. ADJ, CARBON 2200	
RV704	1-237-749-11	RES. ADJ, CARBON 2200		RV704	1-237-749-11	RES. ADJ, CARBON 2200	
<VARIABLE RESISTOR>				*****			
A-1642-031-A		D BOARD, COMPLETE (KV-C2551D ONLY)		<VARIABLE RESISTOR>			
A-1642-032-A		D BOARD, COMPLETE (KV-C2951D ONLY)		RV701	1-230-641-11	RES. ADJ, METAL GLAZE 2.2M	
4-200-001-01		HOLDER, IC		RV702	1-230-619-11	RES. ADJ, METAL GLAZE 110M	
				RV703	1-237-749-11	RES. ADJ, CARBON 2200	
				RV704	1-237-749-11	RES. ADJ, CARBON 2200	

**D**

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
4-201-023-01	SPACER, INSULATING						
*4-341-751-01	EYELET			C520	1-164-161-11	CERAMIC CHIP 0.0022MF	10% 50V
*4-341-752-01	EYELET			C521	1-137-098-11	FILM 0.1MF	10% 100V
*4-368-683-01	SPRING						
<CAPACITOR>							
C002	1-163-205-00	CERAMIC CHIP 0.001MF	5% 50V	C522	1-124-122-11	ELECT 100MF	20% 50V
C003	1-124-925-11	ELECT 2.2MF	20% 50V	C523	1-108-680-11	MYLAR 0.001MF	10% 100V
C004	1-124-120-11	ELECT 220MF	20% 16V	C524	1-108-798-11	MYLAR 0.0033MF	5% 50V
C005	1-124-903-11	ELECT 1MF	20% 50V	C525	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C008	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C526	1-163-101-00	CERAMIC CHIP 22PF	5% 50V
C009	1-163-117-00	CERAMIC CHIP 100PF	5% 50V				
C010	1-124-120-11	ELECT 220MF	20% 16V	C527	1-137-098-11	FILM 0.1MF	10% 100V
C011	1-164-232-11	CERAMIC CHIP 0.01MF	5% 50V	C531	1-124-190-00	ELECT 680MF	10% 25V
C013	1-137-098-11	FILM 0.1MF	10% 100V	C532	1-124-122-11	ELECT 100MF	20% 50V
C014	1-137-098-11	FILM 0.1MF	10% 100V	C533	1-137-096-11	FILM 0.068MF	10% 100V
				C534	1-124-120-11	ELECT 220MF	20% 16V
C015	1-124-902-00	ELECT 0.47MF	20% 50V				
C016	1-163-141-00	CERAMIC CHIP 0.001MF	5% 50V	C536	1-131-365-00	TANTALUM 10MF	10% 16V
C017	1-137-098-11	FILM 0.1MF	10% 100V	C537	1-124-903-11	ELECT 1MF	20% 50V
C018	1-163-127-00	CERAMIC CHIP 270PF	5% 50V	C538	1-108-680-11	MYLAR 0.001MF	10% 100V
C019	1-137-094-11	FILM 0.047MF	10% 100V	C539	1-163-129-00	CERAMIC CHIP 330PF	5% 50V
				C540	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C021	1-163-117-00	CERAMIC CHIP 100PF	5% 50V				
C023	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C592	1-124-122-11	ELECT 100MF	20% 50V
C024	1-163-117-00	CERAMIC CHIP 100PF	5% 50V	C593	1-163-129-00	CERAMIC CHIP 330PF	5% 50V
C027	1-124-910-11	ELECT 47MF	20% 50V	C601	1-161-964-61	CERAMIC 0.0047MF	250V
C030	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C602	1-161-964-61	CERAMIC 0.0047MF	250V
				C603	1-161-964-61	CERAMIC 0.0047MF	250V
C031	1-163-081-00	CERAMIC CHIP 0.22MF	25V				
C032	1-163-081-00	CERAMIC CHIP 0.22MF	25V	C604	1-125-318-11	ELECT (BLOCK) 220MF	20% 400V
C033	1-163-181-00	CERAMIC CHIP 100PF	5% 50V	C605	1-124-484-11	ELECT 220MF	20% 35V
C034	1-163-038-00	CERAMIC CHIP 0.1MF	25V	C606	1-163-137-00	CERAMIC CHIP 680PF	5% 50V
C251	1-124-903-11	ELECT 1MF	20% 50V	C607	1-137-028-11	FILM 1MF	10% 63V
				C608	1-124-927-11	ELECT 4.7MF	20% 50V
C252	1-126-233-11	ELECT 22MF	20% 50V				
C253	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C611	1-124-910-11	ELECT 47MF	20% 50V
C254	1-137-098-11	FILM 0.1MF	10% 100V	C612	1-108-680-11	MYLAR 0.001MF	10% 100V
C255	1-124-636-00	ELECT 3300MF	20% 25V	C613	1-136-539-11	FILM 0.0022MF	3% 2KV
C261	1-124-903-11	ELECT 1MF	20% 50V	C614	1-102-030-00	CERAMIC 330PF	10% 500V
				C615	1-128-142-11	ELECT 1500MF	20% 25V
C262	1-126-233-11	ELECT 22MF	20% 50V				
C263	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V	C616	1-102-030-00	CERAMIC 330PF	10% 500V
C264	1-137-098-11	FILM 0.1MF	10% 100V	C617	1-124-122-11	ELECT 100MF	20% 50V
C265	1-124-564-11	ELECT 4700MF	20% 25V	C618	1-162-115-00	CERAMIC 330PF	10% 2KV
C270	1-137-035-11	FILM 0.47MF	10% 100V	C619	1-128-320-11	ELECT 2200MF	20% 16V
				C620	1-136-173-00	FILM 0.47MF	5% 50V
C274	1-137-035-11	FILM 0.47MF	10% 100V				
C501	1-124-927-11	ELECT 4.7MF	20% 50V	C621	1-124-347-00	ELECT 100MF	20% 160V
C502	1-124-927-11	ELECT 4.7MF	20% 50V	C622	1-128-320-11	ELECT 2200MF	20% 16V
C503	1-137-049-11	FILM 0.015MF	10% 400V	C623	1-124-910-11	ELECT 47MF	20% 50V
C504	1-163-121-00	CERAMIC CHIP 150PF	5% 50V	C624	1-124-122-11	ELECT 100MF	20% 50V
				C625	1-124-360-00	ELECT 1000MF	20% 16V
C505	1-108-794-11	MYLAR 0.0015MF	5% 50V				
C506	1-137-102-11	FILM 0.022MF	10% 250V	C626	1-124-907-11	ELECT 10MF	20% 50V
C507	1-137-033-11	FILM 0.33MF	10% 100V	C627	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C508	1-137-102-11	FILM 0.022MF	10% 250V	C631	1-124-927-11	ELECT 4.7MF	20% 50V
C509	1-137-098-11	FILM 0.1MF	10% 100V	C632	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
				C633	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
C510	1-161-959-00	CERAMIC 22PF	10% 500V				
C511	1-108-686-11	MYLAR 0.0033MF	10% 100V	C801	1-126-105-11	ELECT 1000MF	20% 35V
C512	1-137-098-11	FILM 0.1MF	10% 100V	C802	1-102-030-00	CERAMIC 330PF	10% 500V
C513	1-163-125-00	CERAMIC CHIP 220PF	5% 50V	C804	1-123-948-00	ELECT 22MF	20% 250V
C514	1-137-031-11	FILM 0.22MF	10% 100V	C805	1-162-114-00	CERAMIC 0.0047MF	2KV
				C806	1-137-098-11	FILM 0.1MF	10% 100V
C515	1-124-903-11	ELECT 1MF	20% 50V				
C516	1-108-680-11	MYLAR 0.001MF	10% 100V	C807	1-106-395-00	MYLAR 0.15MF	10% 200V
C517	1-124-252-00	ELECT 0.33MF	20% 50V	C810	1-123-024-21	ELECT 33MF	5% 200V
C518	1-124-902-00	ELECT 0.47MF	20% 50V	C811	1-136-113-00	FILM 2MF	5% 200V
C519	1-136-173-00	FILM 0.47MF	5% 50V	C812	1-124-634-11	ELECT 1MF	20% 250V
				C813	1-102-212-00	CERAMIC 820PF	10% 500V
			(KV-C2551D ONLY)				
1-136-171-00	FILM	0.33MF	5% 50V				
			(KV-C2951D ONLY)				
					1-136-540-11	FILM 0.82MF	5% 200V (KV-C2951D ONLY)

KV-C2551D/C2951D  
RM-816

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

**D**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C817	$\Delta$ 1-136-565-11	FILM	0.015MF 3% 1.4KV (KV-C2551D ONLY)	D272	8-719-911-19	DIODE 1SS119	
	$\Delta$ 1-136-591-11	FILM	0.017MF 3% 1.4KV (KV-C2951D ONLY)	D501	8-719-911-19	DIODE 1SS119	
C818	$\Delta$ 1-129-721-51	FILM	0.039MF 10% 630V	D504	8-719-911-55	DIODE U05G	
C819	$\Delta$ 1-161-731-51	CERAMIC	0.001MF 10% 2KV	D506	8-719-800-76	DIODE 1SS226 (KV-C2551D ONLY)	
C820	1-137-046-11	FILM	0.0082MF 10% 400V	D508	8-719-911-19	DIODE 1SS119	
C821	$\Delta$ 1-162-116-51	CERAMIC	680PF 10% 2KV (KV-C2551D ONLY)	D509	8-719-911-19	DIODE 1SS119	
	$\Delta$ 1-162-134-51	CERAMIC	470PF 10% 2KV (KV-C2951D ONLY)	D511	8-719-911-55	DIODE U05G	
C822	1-163-005-11	CERAMIC CHIP	470PF 10% 50V	D512	8-719-911-55	DIODE U05G	
C823	1-137-043-11	FILM	0.0047MF 10% 400V	D513	8-719-010-34	DIODE UZ-4.7BSC	
C824	1-102-212-00	CERAMIC	820PF 10% 500V	D514	8-719-911-19	DIODE 1SS119 (KV-C2951D ONLY)	
C825	1-137-102-11	FILM	0.022MF 10% 250V	D515	8-719-911-19	DIODE 1SS119 (KV-C2951D ONLY)	
C1601A	1-136-518-11	FILM	0.33MF 20% 300V	D601	$\Delta$ 8-719-510-63	DIODE D4SB60L-F	
C1602A	1-136-519-11	FILM	0.47MF 20% 300V	D602	8-719-300-33	DIODE RU-3AM	
C1603A	1-164-246-51	CERAMIC	0.0022MF 20% 400V	D603	8-719-911-55	DIODE U05G	
C1605A	1-164-246-51	CERAMIC	0.0022MF 20% 400V	D604	8-719-911-55	DIODE U05G	
C1607A	1-161-964-61	CERAMIC	0.0047MF 250V	D605	8-719-911-55	DIODE U05G	
<FILTER>				D606	8-719-300-33	DIODE RU-3AM	
CF001	1-577-364-11	VIBRATOR, CERAMIC		D607	8-719-300-33	DIODE RU-3AM	
CF501	1-567-888-11	OSCILLATOR, CERAMIC		D608	8-719-300-33	DIODE RU-3AM	
<CONNECTOR>				D609	8-719-982-24	DIODE MTZJ-33A	
CND801	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P		D610	8-719-300-59	DIODE CTU-12S	
D1	*1-568-881-51	PIN, CONNECTOR 6P		D611	8-719-900-26	DIODE ERD29-08J	
D2	*1-568-882-51	PIN, CONNECTOR 7P		D612	8-719-300-59	DIODE CTU-12S	
D11	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D613	8-719-979-85	DIODE EGP20G	
D12	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D614	8-719-979-85	DIODE EGP20G	
D18	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)		D616	8-719-921-54	DIODE MTZJ-6.2B	
D21	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D617	8-719-911-19	DIODE 1SS119	
D22	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D618	8-719-109-89	DIODE RD5.6ES-B2	
D31	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D619	8-719-982-24	DIODE MTZJ-33A	
D32	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D620	8-719-800-76	DIODE 1SS226	
D33	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR		D621	8-719-982-24	DIODE MTZJ-33A	
D41	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)		D622	8-719-911-19	DIODE 1SS119	
D44	*1-568-881-51	PIN, CONNECTOR 6P		D623	8-719-911-19	DIODE 1SS119	
D45	*1-568-881-51	PIN, CONNECTOR 6P		D624	8-719-911-19	DIODE 1SS119	
D51	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)		D630	8-719-921-91	DIODE MTZJ-15A	
D62	*1-565-395-11	PIN, CONNECTOR 3P		D801	8-719-300-33	DIODE RU-3AM	
D65	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		D802	8-719-300-33	DIODE RU-3AM	
D66	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		D803	8-719-976-64	DIODE RGP02-17	
D82	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		D804	8-719-911-55	DIODE U05G	
D83	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		D805	8-719-911-55	DIODE U05G	
D84	*1-568-536-11	PLUG (MINIATURE DY) 6P		D806	8-719-945-80	DIODE ERC06-15S	
D88	*1-568-878-51	PIN, CONNECTOR 3P (KV-C2951D ONLY)		D807	8-719-945-80	DIODE ERC06-15S	
D801	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		D808	8-719-900-26	DIODE ERD29-08J	
<DIODE>				<IC>			
D003	8-719-911-19	DIODE 1SS119		IC001	8-759-515-80	IC SDA20560-A008	
D005	8-719-109-89	DIODE RD5.6ES-B2		IC002	8-759-208-06	IC TC4051BPHB	
D006	8-719-982-24	DIODE MTZJ-33A		IC003	8-759-945-58	IC RC4558P	
D007	8-719-982-08	DIODE MTZJ-3.9B		IC005	8-759-748-56	IC SDA2546	
D009	8-719-109-89	DIODE RD5.6ES-B2		IC251	8-759-988-94	IC TDA2050	
D010	8-719-921-54	DIODE MTZJ-6.2B			4-812-134-00	RIVET NYLON, 3.5; IC251	
D011	8-719-921-54	DIODE MTZJ-6.2B		IC261	8-759-988-94	IC TDA2050	
D012	8-719-911-19	DIODE 1SS119			4-812-134-00	RIVET NYLON, 3.5; IC261	
D013	8-719-109-97	DIODE RD6.8ES-B2		IC501	8-759-970-73	IC TEA2028B	
D271	8-719-921-88	DIODE MTZJ-13B		IC502	8-759-944-57	IC TDA8170	
<COIL>				IC601	8-759-988-95	IC TEA2260	
L501	1-408-225-00	INDUCTOR 3.3UH		IC604	8-759-510-52	IC TEA7605	
L601	*1-420-872-00	COIL, AIR CORE		IC608	8-759-929-62	IC LM7812CT	

**L**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
L602	1-410-396-41	FERRITE BEAD INDUCTOR		Q605	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L603	1-410-396-41	FERRITE BEAD INDUCTOR		Q606	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L604	1-410-671-31	INDUCTOR 47UH		Q607	8-729-920-92	TRANSISTOR 2SD2096-EF	
L605	1-459-585-11	COIL (WITH CORE) (DRUM TYPE)					
L606	1-421-013-00	COIL (HORIZONTAL CHOKE) 25UH		Q608	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
				Q609	8-729-320-62	TRANSISTOR 2SD789-34	
L607	1-410-671-31	INDUCTOR 47UH		Q801	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L801	1-459-087-00	COIL, HCC DUST CORE 3.9MMH (KV-C2951D ONLY)		Q804	8-729-304-50	TRANSISTOR 2SD1941-06	
				Q805	8-729-119-80	TRANSISTOR 2SC2688-LK	
L803	1-459-104-00	COIL, DUST CORE					
L804	1-408-239-00	INDUCTOR 4.7MMH					
L805	1-459-755-11	COIL, HORIZONTAL LINEARITY (KV-C2551D ONLY)					
	1-459-907-11	COIL, HORIZONTAL LINEARITY (KV-C2951D ONLY)		JR1	1-216-296-00	METAL GLAZE 0 5% 1/8W	
				JR3	1-216-296-00	METAL GLAZE 0 5% 1/8W	
				JR4	1-216-295-00	METAL GLAZE 0 5% 1/10W	
L806	1-459-111-00	COIL, DRAM CORE (CD1) (KV-C2551D ONLY)		JR7	1-216-296-00	METAL GLAZE 0 5% 1/8W	
				RO01	1-216-041-00	METAL GLAZE 470 5% 1/10W	
	1-459-087-00	COIL, HCC DUST CORE 3.9MMH (KV-C2951D ONLY)		RO02	1-216-041-00	METAL GLAZE 470 5% 1/10W	
				RO03	1-216-198-00	METAL GLAZE 1K 5% 1/8W	
L809	*1-420-872-00	COIL, AIR CORE		RO04	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
L810	Δ 1-421-982-12	PMC (KV-C2551D ONLY)		RO05	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
	Δ 1-421-794-21	TRANSFORMER, FERRITE (PMT) (KV-C2951D ONLY)		RO06	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO07	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				RO08	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO09	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO10	1-216-041-00	METAL GLAZE 470 5% 1/10W	
				RO12	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO13	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO14	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
				RO15	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
				RO16	1-216-085-00	METAL GLAZE 33K 5% 1/10W	
				RO17	1-216-748-11	METAL GLAZE 39K 5% 1/10W	
				RO18	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
				RO19	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				RO20	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				RO21	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				RO22	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
				RO24	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO25	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO26	1-216-182-00	METAL GLAZE 220 5% 1/8W	
				RO27	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				RO28	1-216-025-00	METAL GLAZE 100 5% 1/10W	
				RO29	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO30	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO31	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
				RO32	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO33	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO34	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
				RO35	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
				RO36	1-216-083-00	METAL GLAZE 27K 5% 1/10W	
				RO37	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
				RO38	1-216-069-00	METAL GLAZE 6.8K 5% 1/10W	
				RO39	1-216-081-00	METAL GLAZE 22K 5% 1/10W	
				RO40	1-216-077-00	METAL GLAZE 15K 5% 1/10W	
				RO41	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO42	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
				RO43	1-216-041-00	METAL GLAZE 470 5% 1/10W	
				RO44	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
				RO45	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W	
				RO46	1-216-095-00	METAL GLAZE 82K 5% 1/10W	
				RO47	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO48	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO49	1-216-073-00	METAL GLAZE 10K 5% 1/10W	
				RO50	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
				RO51	1-216-041-00	METAL GLAZE 470 5% 1/10W	

D

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R052	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R502	1-216-033-00	METAL GLAZE	220 5% 1/10W
R053	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R503	1-216-035-00	METAL GLAZE	270 5% 1/10W
R054	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R504	1-249-420-11	CARBON	1.8K 5% 1/4W
R055	1-216-037-00	METAL GLAZE	330 5% 1/10W	R505	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R056	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R506	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R057	1-216-025-00	METAL GLAZE	100 5% 1/10W	R509	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W
R058	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R510	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W
R059	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R514	1-216-033-00	METAL GLAZE	220 5% 1/10W
R060	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R515	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R061	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R517	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R062	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R518	1-216-089-00	METAL GLAZE	47K 5% 1/10W
R063	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R519	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R064	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R520	1-216-037-00	METAL GLAZE	330 5% 1/10W
R065	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R521	1-216-025-00	METAL GLAZE	100 5% 1/10W
R066	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R522	1-215-469-00	METAL	100K 1% 1/4W
R067	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R523	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R068	1-216-174-00	METAL GLAZE	100 5% 1/8W	R524	1-216-057-00	METAL GLAZE	2.2K 5% 1/10W
R069	1-216-174-00	METAL GLAZE	100 5% 1/8W	R525	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R070	1-216-198-00	METAL GLAZE	1K 5% 1/8W				(KV-C2551D ONLY)
R071	1-216-198-00	METAL GLAZE	1K 5% 1/8W	R526	1-249-409-11	CARBON	220 5% 1/4W F
R072	1-216-222-00	METAL GLAZE	10K 5% 1/8W	R527	1-216-077-00	METAL GLAZE	15K 5% 1/10W
R073	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R528	1-216-031-00	METAL GLAZE	180 5% 1/10W
R075	1-216-041-00	METAL GLAZE	470 5% 1/10W	R529	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R076	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R530	1-249-448-11	CARBON	1.2 5% 1/4W F
R078	1-216-198-00	METAL GLAZE	1K 5% 1/8W	R531	1-216-099-00	METAL GLAZE	120K 5% 1/10W
R079	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R532	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R080	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R533	1-216-295-00	METAL GLAZE	0 5% 1/10W
R081	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R534	1-216-119-00	METAL GLAZE	820K 5% 1/10W
R083	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R535	1-249-749-00	CARBON	2.2M 5% 1/4W
R084	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R536	1-216-129-00	METAL GLAZE	2.2M 5% 1/10W
R085	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R537	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R086	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R538	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R087	1-216-035-00	METAL GLAZE	270 5% 1/10W	R539	1-216-101-00	METAL GLAZE	150K 5% 1/10W
R088	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W	R540	1-216-013-00	METAL GLAZE	33 5% 1/10W
R095	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R541	1-216-091-00	METAL GLAZE	56K 5% 1/10W
R094	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R542	1-216-308-00	METAL GLAZE	4.7 5% 1/10W
R095	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R543	1-249-451-11	CARBON	2.2 5% 1/4W
R096	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R544	1-247-745-11	CARBON	330 5% 1/2W
R098	1-216-049-00	METAL GLAZE	1K 5% 1/10W	R545	1-216-081-00	METAL GLAZE	22K 5% 1/10W
R251	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R546	1-216-083-00	METAL GLAZE	27K 5% 1/10W
R252	1-216-039-00	METAL GLAZE	390 5% 1/10W	R547	1-216-061-00	METAL GLAZE	3.3K 5% 1/10W
R253	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R548	1-216-349-00	METAL OXIDE	1 5% 1W F
R254	1-216-357-00	METAL OXIDE	4.7 5% 1W F	R549	1-216-454-11	METAL OXIDE	390 5% 2W F
R255	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R550	1-216-095-00	METAL GLAZE	82K 5% 1/10W
R256	1-216-115-00	METAL GLAZE	560K 5% 1/10W	R551	1-216-129-00	METAL GLAZE	2.2M 5% 1/10W
R257	1-216-077-00	METAL GLAZE	15K 5% 1/10W	R553	1-215-869-11	METAL OXIDE	1K 5% 1W
R258	1-215-869-11	METAL OXIDE	1K 5% 1W F	R554	1-216-037-00	METAL GLAZE	330 5% 1/10W
R259	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R555	1-216-129-00	METAL GLAZE	2.2M 5% 1/10W
R261	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W	R556	1-216-025-00	METAL GLAZE	100 5% 1/10W
R262	1-216-039-00	METAL GLAZE	390 5% 1/10W	R557	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W
R263	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R558	1-216-113-00	METAL GLAZE	470K 5% 1/10W
R264	1-216-357-00	METAL OXIDE	4.7 5% 1W F	R559	1-216-069-00	METAL GLAZE	6.8K 5% 1/10W
R265	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R560	1-216-037-00	METAL GLAZE	330 5% 1/10W
R266	1-216-115-00	METAL GLAZE	560K 5% 1/10W	R561	1-216-107-00	METAL GLAZE	270K 5% 1/10W
R267	1-216-077-00	METAL GLAZE	15K 5% 1/10W				(KV-C2951D ONLY)
R268	1-215-869-11	METAL OXIDE	1K 5% 1W F	R570	1-216-045-00	METAL GLAZE	680 5% 1/10W
R269	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				(KV-C2951D ONLY)
R270	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R591	1-216-047-00	METAL GLAZE	820 5% 1/10W
R271	1-216-045-00	METAL GLAZE	680 5% 1/10W	R592	1-216-049-00	METAL GLAZE	1K 5% 1/10W
R272	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R593	1-216-053-00	METAL GLAZE	1.5K 5% 1/10W
R273	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R594	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
R274	1-216-073-00	METAL GLAZE	10K 5% 1/10W	R597	1-216-041-00	METAL GLAZE	470 5% 1/10W
R500	1-216-115-00	METAL GLAZE	560K 5% 1/10W	R598	1-215-900-11	METAL OXIDE	22K 5% 2W F
R501	1-216-041-00	METAL GLAZE	470 5% 1/10W				

The components identified by shading and mark **1** are critical for safety. Replace only with part number specified.

KV-C2551D / C295  
RM-3

D VN

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R600	1-216-131-11	CARBON	1 5% 1/4W	R1605A	1-218-265-91	METAL GLAZE	8.2M 5% 1W
R601	1-216-155-00	METAL OXIDE	2.2 5% 1W F	R5501	1-216-073-00	METAL GLAZE	10K 5% 1/10W
R603	1-216-169-11	METAL OXIDE	12 5% 3W F	R5503	1-216-308-00	METAL GLAZE	4.7 5% 1/10W
R604	1-216-125-00	METAL GLAZE	100 5% 1/10W		1-216-001-00	METAL GLAZE	10 5% 1/10W
R605	1-216-131-00	METAL GLAZE	22K 5% 1/10W				(KV-C2551D ONLY)
R606	1-216-151-00	METAL GLAZE	1.2K 5% 1/10W	R5504	1-216-121-00	METAL GLAZE	1M 5% 1/10W
R607	1-216-165-00	METAL GLAZE	4.7K 5% 1/10W	R5505	1-216-001-00	METAL GLAZE	10 5% 1/10W
	1-216-167-00	METAL GLAZE	5.6K 5% (KV-C2551D ONLY)	R5506	1-216-075-00	METAL GLAZE	12K 5% 1/10W
			(KV-C2951D ONLY)				(KV-C2951D ONLY)
R608	1-216-488-11	METAL OXIDE	18K 5% 3W F				
R609	1-216-107-00	METAL GLAZE	18 5% 1/10W				
R610	1-216-141-00	CARBON	680K 5% 1/2W				
R611	1-216-115-00	METAL GLAZE	39 5% 1/10W				
R612	1-216-149-00	METAL GLAZE	1K 5% 1/10W				
R613	1-216-197-00	METAL GLAZE	100K 5% 1/10W				
R614	1-216-153-11	WIREWOUND	100 10% 10W F				
R615	1-216-199-00	METAL GLAZE	120K 5% 1/10W				
R617	1-216-037-00	METAL GLAZE	330 5% 1/10W				
R618	1-216-131-11	METAL OXIDE	560 5% 1W F				
R619	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R620	1-216-081-00	METAL GLAZE	22K 5% 1/10W				
R621	1-216-077-00	METAL GLAZE	15K 5% 1/10W				
R622	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R623	1-216-081-00	METAL GLAZE	22K 5% 1/10W				
R624	1-216-067-00	METAL GLAZE	5.6K 5% 1/10W				
R625	1-216-165-11	METAL OXIDE	220 5% 1W F				
R626	1-216-037-00	METAL GLAZE	330 5% 1/10W				
R628	1-216-001-00	METAL GLAZE	10 5% 1/10W				
R629	1-216-037-00	METAL GLAZE	330 5% 1/10W				
R633	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R634	1-216-430-11	METAL OXIDE	390 5% 1W F				
R635	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R636	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R643	1-217-189-21	WIREWOUND	0.12 5% 2W F				
R651	1-216-025-00	METAL GLAZE	100 5% 1/10W				
R653	1-205-758-11	WIREWOUND	100 10% 10W F				
R802	1-249-443-11	CARBON	0.47 5% 1/4W F				
R805	1-249-448-11	CARBON	1.2 5% 1/4W F				
R806	1-216-093-00	METAL GLAZE	68K 5% 1/10W				
R807	1-215-869-11	METAL OXIDE	1K 5% 1W F				
R809	1-202-821-11	SOLID	1.3K 10% 1/2W				
R810	1-202-818-00	SOLID	1K 10% 1/2W				
R811	1-215-882-00	METAL OXIDE	22 5% 2W F				
R812	1-249-494-11	CARBON	68K 5% 1/2W				
			(KV-C2551D ONLY)				
	1-247-281-00	CARBON	51K 5% 1/2W				
			(KV-C2951D ONLY)				
R815	1-215-884-11	METAL OXIDE	47 5% 2W F				
R816	1-215-868-00	METAL OXIDE	680 5% 1W F				
R817	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R820	1-249-403-11	CARBON	68 5% 1/4W				
R821	1-247-725-11	CARBON	10K 5% 1/4W F				
R822	1-217-778-11	FUSIBLE	1K 5% 1W F				
R825	1-216-145-11	METAL OXIDE	0.47 5% 1W F				
R826	1-216-097-00	METAL GLAZE	100K 5% 1/10W				
R827	1-216-073-00	METAL GLAZE	10K 5% 1/10W				
R828	1-216-059-00	METAL GLAZE	2.7K 5% 1/10W				
R829	1-216-051-00	METAL GLAZE	1.2K 5% 1/10W				
R831	1-249-451-11	CARBON	2.2 5% 1/4W				
R1601A	1-216-513-75	CARBON	47K 5% 1/4W				
R1602A	1-216-145-91	CARBON	1M 5% 1/2W				
R1603A	1-217-128-11	WIREWOUND	2.7 10% 7W F				
R1604A	1-216-513-75	CARBON	47K 5% 1/4W				





Standard and metric units are given  
in the order: inch, centimeter, millimeter  
Replace only with part number  
as specified

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R761	1-249-429-11	CARBON	10K 5% 1/4W			<COIL>	
R762	1-247-895-00	CARBON	470K 5% 1/4W	L1	1-408-403-00	INDUCTOR	3.3UH
R763	1-249-429-11	CARBON	10K 5% 1/4W	L2	1-408-407-00	INDUCTOR	6.8UH
R764	1-249-455-11	CARBON	4.7 5% 1/4W F	L3	1-408-407-00	INDUCTOR	6.8UH
R765	1-249-455-11	CARBON	4.7 5% 1/4W F	L4	1-408-407-00	INDUCTOR	6.8UH
R766	1-247-753-11	CARBON	1.2K 5% 1/2W			<IC LINK>	
R767	1-247-751-11	CARBON	820 5% 1/2W	PS1	1-532-679-91	LINK, IC (ICP-N15)	0.6A
R768	1-215-887-00	METAL OXIDE	150 5% 2W F			<TRANSISTOR>	
R769	1-212-889-00	FUSIBLE	220 5% 1/4W F	Q1	8-729-900-53	TRANSISTOR DTC114EK	
		<CONNECTOR>		Q2	8-729-920-92	TRANSISTOR 2SD2096-EF	
VM73	*1-568-878-51	PIN, CONNECTOR 3P		Q3	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
VM88	*1-568-878-51	PIN, CONNECTOR 3P		Q4	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		*****		Q5	8-729-807-87	TRANSISTOR 2SB1295-UL6	
	A-1645-013-A	V BOARD, COMPLETE		Q6	8-729-807-87	TRANSISTOR 2SB1295-UL6	
		*****		Q7	8-729-807-87	TRANSISTOR 2SB1295-UL6	
		<CAPACITOR>		Q8	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
C1	1-126-101-11	ELECT	100MF 20% 16V			<RESISTOR>	
C2	1-163-038-00	CERAMIC CHIP	0.1MF 25V	JR01	1-216-295-00	METAL GLAZE	0 5% 1/10W
C3	1-124-120-11	ELECT	220MF 20% 16V	JR02	1-216-295-00	METAL GLAZE	0 5% 1/10W
C4	1-163-077-00	CERAMIC CHIP	0.1MF 50V	JR03	1-216-295-00	METAL GLAZE	0 5% 1/10W
C5	1-124-120-11	ELECT	220MF 20% 16V	JR08	1-216-295-00	METAL GLAZE	0 5% 1/10W
C6	1-163-038-00	CERAMIC CHIP	0.1MF 25V	JR09	1-216-295-00	METAL GLAZE	0 5% 1/10W
C10	1-163-038-00	CERAMIC CHIP	0.1MF 25V	JR11	1-216-295-00	METAL GLAZE	0 5% 1/10W
C11	1-163-038-00	CERAMIC CHIP	0.1MF 25V	JR14	1-216-296-00	METAL GLAZE	0 5% 1/8W
C12	1-163-038-00	CERAMIC CHIP	0.1MF 25V	JR17	1-216-295-00	METAL GLAZE	0 5% 1/10W
C13	1-163-038-00	CERAMIC CHIP	0.1MF 25V	JR18	1-216-296-00	METAL GLAZE	0 5% 1/8W
C14	1-124-927-11	ELECT	4.7MF 20% 50V	JR19	1-216-296-00	METAL GLAZE	0 5% 1/8W
C15	1-124-927-11	ELECT	4.7MF 20% 50V	JR20	1-216-296-00	METAL GLAZE	0 5% 1/8W
C16	1-163-141-00	CERAMIC CHIP	0.001MF 5% 50V	JR21	1-216-296-00	METAL GLAZE	0 5% 1/8W
C17	1-163-141-00	CERAMIC CHIP	0.001MF 5% 50V	JR23	1-216-295-00	METAL GLAZE	0 5% 1/10W
C18	1-163-141-00	CERAMIC CHIP	0.001MF 5% 50V	JR24	1-216-296-00	METAL GLAZE	0 5% 1/8W
C26	1-163-038-00	CERAMIC CHIP	0.1MF 25V	JR25	1-216-296-00	METAL GLAZE	0 5% 1/8W
C27	1-163-117-00	CERAMIC CHIP	100PF 5% 50V	JR26	1-216-296-00	METAL GLAZE	0 5% 1/8W
C28	1-163-117-00	CERAMIC CHIP	100PF 5% 50V	JR201	1-216-295-00	METAL GLAZE	0 5% 1/10W
C29	1-163-117-00	CERAMIC CHIP	100PF 5% 50V	JR204	1-216-295-00	METAL GLAZE	0 5% 1/10W
C32	1-163-038-00	CERAMIC CHIP	0.1MF 25V	JR207	1-216-295-00	METAL GLAZE	0 5% 1/10W
C33	1-163-038-00	CERAMIC CHIP	0.1MF 25V	JR208	1-216-295-00	METAL GLAZE	0 5% 1/10W
		<CONNECTOR>		JR211	1-216-295-00	METAL GLAZE	0 5% 1/10W
CNV1	*1-565-393-11	CONNECTOR, BOARD TO BOARD		JR213	1-216-295-00	METAL GLAZE	0 5% 1/10W
CNV2	*1-565-393-11	CONNECTOR, BOARD TO BOARD		JR219	1-216-296-00	METAL GLAZE	0 5% 1/8W
		<DIODE>		JR220	1-216-295-00	METAL GLAZE	0 5% 1/10W
D1	8-719-105-91	DIODE RD5.6M-B2		JR223	1-216-295-00	METAL GLAZE	0 5% 1/10W
D3	8-719-914-44	DIODE DAP202K		R1	1-218-326-11	METAL GLAZE	470 5% 1/2W
D4	8-719-400-18	DIODE MA152WK		R3	1-216-049-00	METAL GLAZE	1K 5% 1/10W
D5	8-719-914-44	DIODE DAP202K		R4	1-216-025-00	METAL GLAZE	100 5% 1/10W
D6	8-719-400-18	DIODE MA152WK		R5	1-216-047-00	METAL GLAZE	820 5% 1/10W
D7	8-719-105-52	DIODE RD3.6M-B2		R6	1-216-001-00	METAL GLAZE	10 5% 1/10W
D9	8-719-106-17	DIODE RD6.8M-B2		R7	1-216-083-00	METAL GLAZE	27K 5% 1/10W
		<IC>		R8	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W
IC1	8-759-039-18	IC SPA20162-B002		R9	1-216-308-00	METAL GLAZE	4.7 5% 1/10W
IC2	8-759-510-46	IC SAA5246P/E		R02	1-216-214-00	METAL GLAZE	4.7K 5% 1/8W
IC3	8-759-510-49	IC PCB61C65-70P		R10	1-218-325-11	METAL GLAZE	120 5% 1/4W
				R11	1-218-325-11	METAL GLAZE	120 5% 1/4W
				R12	1-218-325-11	METAL GLAZE	120 5% 1/4W
				R13	1-216-025-00	METAL GLAZE	100 5% 1/10W
				R14	1-216-001-00	METAL GLAZE	10 5% 1/10W
				R15	1-216-013-00	METAL GLAZE	33 5% 1/10W

V

H1

H2

J2

J1

REF. NO.	PART NO.	DESCRIPTION	REMARK
R16	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R17	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R18	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R19	1-216-025-00	METAL GLAZE 100 5% 1/10W	
R20	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R21	1-216-041-00	METAL GLAZE 470 5% 1/10W	
R22	1-216-163-00	METAL GLAZE 56 5% 1/8W	
R23	1-216-014-00	METAL GLAZE 4.7K 5% 1/8W	
R24	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W	
R25	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R26	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R27	1-216-014-00	METAL GLAZE 4.7K 5% 1/8W	
R28	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W	
R34	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R35	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R40	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R41	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R42	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R44	1-216-295-00	METAL GLAZE 0 5% 1/10W	
R46	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R47	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W	
R49	1-216-049-00	METAL GLAZE 1K 5% 1/10W	
R50	1-216-296-00	METAL GLAZE 0 5% 1/8W	

## &lt;VARIABLE RESISTOR&gt;

RV1 1-238-012-11 RES. ADJ. CARBON 1K

## &lt;CRYSTAL&gt;

X1 1-579-266-21 CRYSTAL VIBRATOR  
X2 1-577-364-11 VIBRATOR, CERAMIC\*1-638-391-11 H1 BOARD  
\*\*\*\*\*

## &lt;CONNECTOR&gt;

H1-1 \*1-568-881-51 PIN, CONNECTOR 6P  
H1-02 1-568-678-11 TERMINAL BLOCK, S 3P  
H1-4 \*1-568-879-51 PIN, CONNECTOR 4P  
H1-05 1-562-837-11 JACK  
H1-23 \*1-568-879-51 PIN, CONNECTOR 4P  
H1-43 \*1-564-512-11 PLUG, CONNECTOR 9P

## &lt;RESISTOR&gt;

R1651 1-249-413-11 CARBON 470 5% 1/4W  
R1652 1-249-413-11 CARBON 470 5% 1/4W

## &lt;SWITCH&gt;

S1651 1-571-532-21 SWITCH, TACTIL  
S1652 1-571-532-21 SWITCH, TACTIL  
S1653 1-571-532-21 SWITCH, TACTIL\*1-638-392-11 H2 BOARD  
\*\*\*\*\*\*4-374-987-01 GUIDE, LIGHT  
\*4-381-686-01 BRACKET (B), LIGHT GUIDE

REF. NO. PART NO. DESCRIPTION REMARK

## &lt;DIODE&gt;

D1651 8-719-948-31 DIODE LD-201VR  
\*4-201-076-01 HOLDER, LED; D1651  
D1652 8-719-948-31 DIODE LD-201VR  
\*4-201-076-01 HOLDER, LED; D1652  
D1654 8-719-948-31 DIODE LD-201VR  
\*4-201-076-01 HOLDER, LED; D1654

## &lt;CONNECTOR&gt;

H2-2 \*1-568-882-51 PIN, CONNECTOR 7P

## &lt;IC&gt;

IC1651 3-741-101-75 IC SBX1610-11

## &lt;RESISTOR&gt;

R1662 1-249-413-11 CARBON 470 5% 1/4W

\*1-638-393-11 J2 BOARD  
\*\*\*\*\*

## &lt;CAPACITOR&gt;

C1751 1-101-005-00 CERAMIC 0.022MF 50V  
C1752 1-101-005-00 CERAMIC 0.022MF 50V

## &lt;CONNECTOR&gt;

J2-1 1-537-339-11 TERMINAL BOARD  
J2-4 \*1-564-519-11 PLUG, CONNECTOR 4P  
J2-6 \*1-560-278-21 PLUG, CONNECTOR 4P

## &lt;COIL&gt;

L1751 1-412-240-11 INDUCTOR, WIDE BAND  
L1752 1-412-240-11 INDUCTOR, WIDE BAND

A-1651-018-A J1 BOARD, COMPLETE (KV-C2551D ONLY)

A-1651-020-A J1 BOARD, COMPLETE (KV-C2951D ONLY)

## &lt;CAPACITOR&gt;

C203 1-124-925-11 ELECT 2.2MF 20% 50V  
C205 1-124-927-11 ELECT 4.7MF 20% 50V  
C206 1-124-925-11 ELECT 2.2MF 20% 50V  
C207 1-124-927-11 ELECT 4.7MF 20% 50V  
C213 1-126-233-11 ELECT 32MF 20% 50V  
C214 1-137-045-11 FILM 0.0068MF 10% 400V  
C217 1-137-045-11 FILM 0.0068MF 10% 400V  
C218 1-137-192-11 FILM 0.022MF 10% 250V  
C219 1-137-102-11 FILM 0.022MF 10% 250V  
C220 1-108-686-11 MYLAR 0.0033MF 10% 100V  
C221 1-108-686-11 MYLAR 0.0033MF 10% 100V  
C222 1-137-095-11 FILM 0.056MF 10% 100V  
C223 1-137-095-11 FILM 0.056MF 10% 100V  
C224 1-137-047-11 FILM 0.01MF 10% 400V

<IC>



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
		<JACK>					
J1402	1-561-534-41	SOCKET 21P		R1401	1-216-623-00	METAL GLAZE 32 5%	1/10W
J1403	1-561-534-41	SOCKET 21P		R1402	1-216-170-00	METAL GLAZE 68 5%	1/8W
		<TRANSISTOR>					
Q201	3-729-120-28	TRANSISTOR 2SC1623-L5L6		R1403	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q202	3-729-120-28	TRANSISTOR 2SC1623-L5L6		R1404	1-216-178-00	METAL GLAZE 150 5%	1/8W
Q1401	3-729-216-22	TRANSISTOR 2SA1162-G		R1405	1-249-434-11	CARBON 27K 5%	1/4W
Q1402	3-729-120-28	TRANSISTOR 2SC1623-L5L6		R1407	1-216-113-00	METAL GLAZE 470K 5%	1/10W
Q1403	3-729-120-28	TRANSISTOR 2SC1623-L5L6		R1408	1-216-089-00	METAL GLAZE 47K 5%	1/10W
Q1404	3-729-216-22	TRANSISTOR 2SA1162-G					
		<RESISTOR>		R1409	1-216-041-00	METAL GLAZE 470 5%	1/10W
R201	1-216-079-00	METAL GLAZE 18K 5%	1/10W	R1410	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R202	1-216-026-00	METAL GLAZE 2.2K 5%	1/8W	R1411	1-216-041-00	METAL GLAZE 470 5%	1/10W
R203	1-216-075-00	METAL GLAZE 12K 5%	1/10W	R1412	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R204	1-216-035-00	METAL GLAZE 33K 5%	1/10W	R1413	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R205	1-216-035-00	METAL GLAZE 33K 5%	1/10W				
R206	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R1414	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R207	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W	R1415	1-216-083-00	METAL GLAZE 27K 5%	1/10W
R208	1-216-077-00	METAL GLAZE 15K 5%	1/10W	R1416	1-216-083-00	METAL GLAZE 27K 5%	1/10W
R209	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R1417	1-216-023-00	METAL GLAZE 32 5%	1/10W
R210	1-216-077-00	METAL GLAZE 15K 5%	1/10W	R1418	1-247-738-11	CARBON 32 5%	1/2W F
R211	1-216-097-00	METAL GLAZE 100K 5%	1/10W				
R212	1-216-031-00	METAL GLAZE 22K 5%	1/10W	R1419	1-216-295-00	METAL GLAZE 0 5%	1/10W
R213	1-216-077-00	METAL GLAZE 15K 5%	1/10W	R1420	1-216-295-00	METAL GLAZE 0 5%	1/10W
R214	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1421	1-216-295-00	METAL GLAZE 0 5%	1/10W
R215	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R1422	1-216-025-00	METAL GLAZE 100 5%	1/10W
R216	1-216-081-00	METAL GLAZE 22K 5%	1/10W	R1423	1-216-083-00	METAL GLAZE 27K 5%	1/10W
R217	1-216-077-00	METAL GLAZE 15K 5%	1/10W				
R218	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1424	1-216-083-00	METAL GLAZE 27K 5%	1/10W
R219	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R1425	1-216-045-00	METAL GLAZE 680 5%	1/10W
R220	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R1426	1-216-025-00	METAL GLAZE 100 5%	1/10W
R221	1-216-041-00	METAL GLAZE 470 5%	1/10W	R1427	1-216-001-00	METAL GLAZE 10 5%	1/10W
R222	1-216-041-00	METAL GLAZE 470 5%	1/10W	R1428	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R223	1-216-049-00	METAL GLAZE 1K 5%	1/10W				
R224	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R1429	1-216-113-00	METAL GLAZE 470K 5%	1/10W
R225	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R1430	1-216-170-00	METAL GLAZE 68 5%	1/8W
R226	1-216-049-00	METAL GLAZE 1K 5%	1/10W	R1431	1-216-041-00	METAL GLAZE 470 5%	1/10W
R227	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1432	1-216-041-00	METAL GLAZE 470 5%	1/10W
R228	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1433	1-216-033-00	METAL GLAZE 220 5%	1/10W
R229	1-216-075-00	METAL GLAZE 12K 5%	1/10W				
R230	1-216-079-00	METAL GLAZE 18K 5%	1/10W	R1434	1-249-393-11	CARBON 10 5%	1/4W F
R231	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R1437	1-249-434-11	CARBON 27K 5%	1/4W
R232	1-216-073-00	METAL GLAZE 10K 5%	1/10W	R1440	1-216-045-00	METAL GLAZE 680 5%	1/10W
R233	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R1441	1-216-045-00	METAL GLAZE 680 5%	1/10W
R234	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W	R1442	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R235	1-216-295-00	METAL GLAZE 0 5%	1/10W				
R236	1-216-295-00	METAL GLAZE 0 5%	1/10W	R1443	1-216-089-00	METAL GLAZE 47K 5%	1/10W
R240	1-216-033-00	METAL GLAZE 220 5%	1/10W	R1444	1-216-033-00	METAL GLAZE 220 5%	1/10W
R241	1-216-091-00	METAL GLAZE 56K 5%	1/10W	R1445	1-216-095-00	METAL GLAZE 32K 5%	1/10W
R242	1-216-091-00	METAL GLAZE 56K 5%	1/10W	R1446	1-216-033-00	METAL GLAZE 220 5%	1/10W
R243	1-216-075-00	METAL GLAZE 12K 5%	1/10W	R1447	1-216-033-00	METAL GLAZE 220 5%	1/10W
R244	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W				
R245	1-216-075-00	METAL GLAZE 12K 5%	1/10W	R1448	1-216-025-00	METAL GLAZE 100 5%	1/10W
R246	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W	R1449	1-216-023-00	METAL GLAZE 32 5%	1/10W
R247	1-216-075-00	METAL GLAZE 12K 5%	1/10W	R1452	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R248	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W	R1453	1-216-049-00	METAL GLAZE 1K 5%	1/10W
R249	1-216-075-00	METAL GLAZE 12K 5%	1/10W	R1454	1-216-180-00	METAL GLAZE 180 5%	1/8W
R250	1-216-067-00	METAL GLAZE 5.6K 5%	1/10W				
R1400	1-216-295-00	METAL GLAZE 0 5%	1/10W	R1455	1-216-180-00	METAL GLAZE 180 5%	1/8W
				R1457	1-216-025-00	METAL GLAZE 100 5%	1/10W
				R1459	1-216-025-00	METAL GLAZE 100 5%	1/10W
				R1460	1-216-065-00	METAL GLAZE 4.7K 5%	1/10W
				R1461	1-216-190-00	METAL GLAZE 470 5%	1/8W
				R1462	1-216-057-00	METAL GLAZE 2.2K 5%	1/10W
				R1463	1-216-049-00	METAL GLAZE 1K 5%	1/10W
				R1464	1-216-061-00	METAL GLAZE 3.3K 5%	1/10W
				R1465	1-216-023-00	METAL GLAZE 32 5%	1/10W
				R1466	1-216-033-00	METAL GLAZE 220 5%	1/10W
				R1467	1-216-025-00	METAL GLAZE 100 5%	1/10W
				R1468	1-216-025-00	METAL GLAZE 100 5%	1/10W
				R1469	1-216-025-00	METAL GLAZE 100 5%	1/10W
				R1470	1-216-025-00	METAL GLAZE 100 5%	1/10W
				R1471	1-216-023-00	METAL GLAZE 32 5%	1/10W
				R1472	1-216-023-00	METAL GLAZE 32 5%	1/10W

J1 IFG

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R1473	1-216-023-00	METAL GLAZE 82 5% 1/10W		C7	1-124-903-11	ELECT 1MF 20% 50V	
R1474	1-216-113-00	METAL GLAZE 470K 5% 1/10W		C8	1-124-907-11	ELECT 10MF 20% 50V	
R1476	1-216-089-00	METAL GLAZE 47K 5% 1/10W		C9	1-130-471-00	MYLAR 0.001MF 5% 50V	
R1477	1-216-089-00	METAL GLAZE 47K 5% 1/10W		C10	1-163-121-00	CERAMIC CHIP 150PF 5% 50V	
R1478	1-216-113-00	METAL GLAZE 470K 5% 1/10W		C11	1-163-119-00	CERAMIC CHIP 120PF 5% 50V	
R1480	1-216-190-00	METAL GLAZE 470 5% 1/8W		C12	1-136-298-00	FILM 0.0033MF 2% 100V	
R1482	1-216-178-00	METAL GLAZE 150 5% 1/8W		C13	1-124-477-11	ELECT 47MF 20% 16V	
R1483	1-216-178-00	METAL GLAZE 150 5% 1/8W		C14	1-124-477-11	ELECT 47MF 20% 16V	
R1484	1-216-073-00	METAL GLAZE 10K 5% 1/10W		C15	1-124-477-11	ELECT 47MF 20% 16V	
R1485	1-216-073-00	METAL GLAZE 10K 5% 1/10W		C16	1-124-477-11	ELECT 47MF 20% 16V	
R1486	1-216-073-00	METAL GLAZE 10K 5% 1/10W		C17	1-124-907-11	ELECT 10MF 20% 50V	
R1487	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W		C18	1-137-047-11	FILM 0.01MF 10% 400V	
R1488	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W		C19	1-137-047-11	FILM 0.01MF 10% 400V	
R1489	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W		C20	1-126-233-11	ELECT 22MF 20% 50V	
R1501	1-216-081-00	METAL GLAZE 22K 5% 1/10W		C21	1-126-233-11	ELECT 22MF 20% 50V	
R1502	1-216-083-00	METAL GLAZE 27K 5% 1/10W		C22	1-137-098-11	FILM 0.1MF 10% 100V	
R1503	1-216-113-00	METAL GLAZE 470K 5% 1/10W		C23	1-137-031-11	FILM 0.22MF 10% 100V	
R1504	1-216-085-00	METAL GLAZE 33K 5% 1/10W		C24	1-124-034-51	ELECT 33MF 20% 16V	
R1505	1-216-081-00	METAL GLAZE 22K 5% 1/10W		C25	1-137-102-11	FILM 0.022MF 10% 250V	
R1506	1-216-113-00	METAL GLAZE 470K 5% 1/10W		C26	1-137-094-11	FILM 0.047MF 10% 100V	
R1509	1-216-105-00	METAL GLAZE 220K 5% 1/10W		C27	1-124-903-11	ELECT 1MF 20% 50V	
R1510	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W		C28	1-163-109-00	CERAMIC CHIP 47PF 5% 50V	
R1511	1-216-049-00	METAL GLAZE 1K 5% 1/10W		C29	1-124-903-11	ELECT 1MF 20% 50V	
R1512	1-216-073-00	METAL GLAZE 10K 5% 1/10W		C30	1-124-903-11	ELECT 1MF 20% 50V	
R1513	1-216-091-00	METAL GLAZE 56K 5% 1/10W		C31	1-137-047-11	FILM 0.01MF 10% 400V	
R1514	1-216-049-00	METAL GLAZE 1K 5% 1/10W		C32	1-130-479-00	MYLAR 0.0047MF 5% 50V	
R1515	1-216-117-00	METAL GLAZE 680K 5% 1/10W	(KV-C2551D ONLY)	C33	1-163-081-00	CERAMIC CHIP 0.22MF 10% 25V	
R1516	1-216-079-00	METAL GLAZE 18K 5% 1/10W		C34	1-137-031-11	FILM 0.22MF 10% 100V	
R1517	1-216-033-00	METAL GLAZE 220 5% 1/10W		C35	1-124-907-11	ELECT 10MF 20% 50V	
R1519	1-216-101-00	METAL GLAZE 150K 5% 1/10W		C36	1-163-119-00	CERAMIC CHIP 120PF 5% 50V	
R1520	1-216-113-00	METAL GLAZE 470K 5% 1/10W		C37	1-124-477-11	ELECT 47MF 20% 16V	
	1-216-111-00	METAL GLAZE 390K 5% 1/10W	(KV-C2551D ONLY)	C38	1-124-477-11	ELECT 47MF 20% 16V	
			(KV-C2951D ONLY)	C39	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
R1521	1-216-214-00	METAL GLAZE 4.7K 5% 1/8W		<FILTER>			
R1550	1-216-349-00	METAL OXIDE 1 5% 1W F	(KV-C2951D ONLY)	CDA1	1-404-751-11	DISCRIMINATOR, CERAMIC	
R1556	1-216-067-00	METAL GLAZE 5.6K 5% 1/10W		CDA2	1-404-750-11	DISCRIMINATOR, CERAMIC	
				SFT1	1-527-840-00	FILTER, CERAMIC	
				SFT2	1-527-839-00	FILTER, CERAMIC	
<VARIABLE RESISTOR>				<DIODE>			
RV1501	1-238-023-11	RES. ADJ. CARBON 470K		D3	8-719-400-18	DIODE MA152WK	
RV1502	1-238-016-11	RES. ADJ. CARBON 10K		<IC>			
RV1503	1-238-017-11	RES. ADJ. CARBON 22K		IC1	8-759-003-90	IC TBA129	
RV1504	1-238-012-11	RES. ADJ. CARBON 1K		IC2	8-759-003-90	IC TBA129	
RV1505	1-238-023-11	RES. ADJ. CARBON 470K		IC3	8-759-030-48	IC TDA6600-2	
RV1506	1-238-017-11	RES. ADJ. CARBON 22K		IC4	8-759-513-48	IC TDA2595/V9	
RV1507	1-238-009-11	RES. ADJ. CARBON 220		<CONNECTOR>			
RV1508	1-238-016-11	RES. ADJ. CARBON 10K		IFG13	*1-565-488-11	CONNECTOR, BOARD TO BOARD 12P	
RV1509	1-238-023-11	RES. ADJ. CARBON 470K		<COIL>			
*****				L1	1-408-410-00	INDUCTOR 12UH	
A-1654-004-A IFG BOARD, COMPLETE				L2	1-408-410-00	INDUCTOR 12UH	
*****				L3	1-410-064-11	INDUCTOR 2.7MMH	
<CAPACITOR>				L4	1-408-421-00	INDUCTOR 100UH	
C1	1-164-232-11	CERAMIC CHIP 0.01MF 50V		L5	1-408-421-00	INDUCTOR 100UH	
C2	1-164-232-11	CERAMIC CHIP 0.01MF 50V					
C3	1-164-232-11	CERAMIC CHIP 0.01MF 50V					
C4	1-164-232-11	CERAMIC CHIP 0.01MF 50V					
C5	1-164-232-11	CERAMIC CHIP 0.01MF 50V					
C6	1-164-232-11	CERAMIC CHIP 0.01MF 50V					

The components identified by shading and mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

KV-C2551D/C2951D  
RM-816

IFG

REF. NO.	PART NO.	DESCRIPTION	REMARK
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<TRANSISTOR>

Q2	3-729-901-00	TRANSISTOR DTC124EK	
Q3	3-729-216-22	TRANSISTOR 2SA1162-G	
Q4	3-729-901-00	TRANSISTOR DTC124EK	

<RESISTOR>

JR8	1-216-296-00	METAL GLAZE	0	5%	1/8W
JR10	1-216-296-00	METAL GLAZE	0	5%	1/8W
R1	1-216-045-00	METAL GLAZE	680	5%	1/10W
R2	1-216-043-00	METAL GLAZE	560	5%	1/10W
R3	1-216-043-00	METAL GLAZE	560	5%	1/10W
R5	1-216-045-00	METAL GLAZE	680	5%	1/10W
R6	1-216-043-00	METAL GLAZE	560	5%	1/10W
R7	1-216-043-00	METAL GLAZE	560	5%	1/10W
R9	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R11	1-216-095-00	METAL GLAZE	82K	5%	1/10W
R12	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R13	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R15	1-216-059-00	METAL GLAZE	2.7K	5%	1/10W
R16	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R17	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R18	1-216-063-00	METAL GLAZE	3.9K	5%	1/10W
R19	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R20	1-216-075-00	METAL GLAZE	12K	5%	1/10W
R22	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R24	1-216-089-00	METAL GLAZE	47K	5%	1/10W
R25	1-216-077-00	METAL GLAZE	15K	5%	1/10W

<VARIABLE RESISTOR>

RV1	1-238-016-11	RES. ADJ. CARBON 10K	
RV2	1-238-019-11	RES. ADJ. CARBON 47K	

MISCELLANEOUS  
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1-236-510-11	NETWORK, DIVIDING
$\Delta$ 1-426-372-11	COIL, DEMAGNETIZATION (KV-C2551D ONLY)
$\Delta$ 1-426-398-11	COIL, DEMAGNETIZATION (KV-C2951D ONLY)
$\Delta$ 1-451-311-21	DEFLECTION YOKE (Y25FXA) (KV-C2551D ONLY)
$\Delta$ 1-451-313-21	DEFLECTION YOKE (Y29FXA) (KV-C2951D ONLY)

1-452-032-00	MAGNET, DISK: 10MM $\phi$
1-452-094-00	MAGNET, ROTATABLE DISK: 15MM $\phi$
$\Delta$ 1-452-509-42	NECK ASSY, PICTURE TUBE (NA-308) (KV-C2951D ONLY)

1-544-146-11 SPEAKER

1-544-147-11	SPEAKER
$\Delta$ 1-590-501-11	CORD, POWER (WITH NOISE FILTER)

V901 $\Delta$ 8-733-224-05	PICTURE TUBE (A59JWC60X) (KV-C2551D ONLY)
$\Delta$ 8-733-823-05	PICTURE TUBE (A68JYK60X) (KV-C2951D ONLY)

ACCESSORIES AND PACKING MATERIALS  
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PART NO.	DESCRIPTION	REMARK
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4-200-632-11	MANUAL, INSTRUCTION (GERMAN/ENGLISH/FRENCH/DUTCH/ITALIAN/PORTUGUESE)	
*4-200-236-01	CUSHION (UPPER) (ASSY) (KV-C2551D ONLY)	
*4-200-359-01	CUSHION (UPPER) (ASSY) (KV-C2951D ONLY)	
*4-200-237-01	INDIVIDUAL CARTON (KV-C2551D ONLY)	

*4-200-360-01	INDIVIDUAL CARTON (KV-C2951D ONLY)	
*4-200-238-01	CUSHION (LOWER) (KV-C2551D ONLY)	
*4-200-361-01	CUSHION (LOWER) (KV-C2951D ONLY)	
*4-381-155-01	BAG, PROTECTION (KV-C2551D ONLY)	
*4-384-027-01	BAG, PROTECTION (KV-C2951D ONLY)	

REMOTE COMMANDER

1-465-796-11	CONTROL UNIT, REMOTE (RM-316)
4-031-670-01	COVER, POCKET (FOR RM-816)